⇒HOME ECONOMY.«

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HOME ECONOMY,

ETC.

SECOND EDITION.

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COMPILED AND EDITED BY P. PRATT

SALT LAKE CITY, UTAH.

"ECONOMY IS WEALTH."





PRINTED AT GEO. Q. CANNON & SONS CO., SALT LAKE CITY.

PREFACE.

The first edition of this little work having been receive with favor, I now venture to offer my friends and the general public, a new, revised, and enlarged edition. The subject matter of this hand-book of reference and home formulas has been colated, compiled and arranged with care, principally from rare and costly scientific works (to which the masses do not have access),—with new home facts from other sources, now presented in a condensed, cheap and simplified form. The object of the compiler has been to give a few key-notes on home economy and health, and the getting, spending and saving of money. How well we have succeeded a charitable public must decide.

THE COMPILER AND EDITOR.



HOME ECONOMY, ETC.

Avoid Debt.-Every man who would get on in the world, should, as far as possible, avoid debt. From the very outset of his career he should resolve to live within his income, however paltry it may be. The art of living easily as to money is very simple-pitch your scale of living one degree below your means. All the world's wisdom on the subject is most tersely epitomized in the words of Dicken's Micawber: Annual income, twenty pounds; annual expenditure, nineteen pounds sixpence; result, happiness. Annual income, twenty pounds; annual expenditure, twenty pounds and sixpence; result, misery. Many a man dates his downfall from the day when he began borrowing money. Avoid the first obligation, for that incurred others follow, one necessitating the other. Every day the victim will get more entangled; then follow pretexts, excuses, lies, till all sense of shame is lost, the whole life becomes a makeshift, and the debtor in despair finally resolves to live by indirect robbery and falsehood. - Edison's New Encyclopaedia.

A Wilful Child.—If we take our wilful ones aside, and, speaking to them in an earnest, loving, and yet calm and temperate spirit, persuade them we only wish their highest good, depend upon it, the day is ours.—"Gems of Thought," Canadian Family Herald, Dec., 1894.

Abstinence as a Cure for Disease.—Disease may often be cured by abstinence from all food and drink,

especially if the disorders have been produced by luxurious living and repletion. The latter overtaxes nature, and it rebels against such treatment. Indigestion, giddiness, headache, mental depression, etc., are often the effects of greediness in meat and drink. Omitting one, two, or three meals, or more, allows the system to rest, to regain strength, and allows the clogged organs to dispose of their burdens. The practice of drug-taking to cleanse the stomach, though it may give the needed relief, always weakens the system, while abstinence often secures the same result, and yet does no injury.—Dick's Encyclopaedia.

Age to Marry.—Dr. Granville, of France, claims to prove from French history and statistics, that the "best results from marriage would follow, did our girls not marry until after twenty, and our men till after twenty-two or even twenty-four."—Gaskell's Compendium of Forms.

Apple Tree Borer Preventative.—A. E. Wallace, Milton, Que., wishes to know the best preventative for apple borers.

Answer—I have experienced no difficulty in preventing injury from this insect in the orchard of the Experimental Farm during the past six years. The course followed here is to wash the trunks of the trees during the first week in June, with a solution of washing soda and soft soap, made of sal soda and soft soap, in the following proportions: Dissolve one pound of washing soda (sal soda) in one gallon of water and thicken this to the consistency of paint by the addition of soft soap. Apply to the main branches and trunks of the trees, as low as possible, with a whitewash brush. If after the application is made rain does not follow till it has become

dried, it will form a more or less resinous coating on the bark of the tree, which has the effect of preventing the deposition or at least the hatching of the eggs by the adult beetle, the larvæ of which is known as the "Apple Tree Borer." This treatment has also the effect of destroying other scale insects affecting the apple, besides keeping the bark in a healthy and growing condition. When trees have become infected with borers the only remedy lies in carefully examining the base of the trunk of each tree during the month of June. The presence of the borer is readily detected by the characteristic deposit of sawdust-like chips. The larvæ should then be destroyed by probing with a piece of flexible wire.—J. C. Canada.

Artificial Skin for Cuts, etc.—A small quantity of collodion applied with a brush to a cut or wound will produce a perfect artificial covering which is more elastic than plaster, and insoluble in cold water.—U. S. Pharmacopoeia.

Alfalfa or Lucern.—"The philosophers have been inquiring into the secrets of the alfalfa plant, and have found that the hay is, in money value, 45 per cent. better than clover, and 60 per cent. better than timothy. This," writes the editor of the *Field and Farm*, "carries out our long-expressed theory that alfalfa is the greatest all-round forage plant the world has ever known.—Kansas State Board of Agriculture, Nov. 30, 1894.

Asafætida: Medical Properties and Uses.—It is employed in the treatment of hysteria, convulsions, spasm of the stomach and bowels, and nervous disorders. Good for croup, measles and catarrh.—U. S. Dis.

Cross or Nervous Person or Child.—Asafætida

one desert spoonful. Brandy one half-pint. Bottle, label, cork, and shake and let settle. Dose for child, one teaspoonful, with a little water, once or twice a day.—Mrs. Lucy Brady, Union.

Ants.—To destroy ants,—Powdered borax sprinkled around the infested places will exterminate both red and black ants. Red ants may be banished from a pantry or storeroom by strewing on the shelves a small quantity of cloves, either whole or powdered. Red pepper sprinkled around is another good remedy.

Another good plan is to grease a tin plate with lard, placing a few sticks for the ants to climb upon. Occasionally turn the plate bottom up over the fire and the ants will fall in with the melted lard. Gum camphor rubbed on the shelves two or three times a week is also said to be an effective means of getting rid of these pests.

— Canadian Family Herald, Aug. 14, 1894. Edison Cyclopedia, 1893.

Another plan. Dig up the ant beds, mix into a stiff morar and wheel them away.—James C. Brown, Sandy City, Utah.

Axle Grease.—An excellent axle grease is prepared by melting in an open, capacious iron boiler, over a moderate fire, one part of red transparent rosin and one of rendered tallow. When the melting is complete add gradually and with constant stirring one part of caustic soda-lye. When the mixture ceases to rise, add one part of linseed oil; let the whole boil for a quarter of an hour. Strain while boiling hot through a cotton cloth into a clean vessel and let it cool. This will give a beautiful lemon-colored buttery grease, which does not gum.— Canadian Family Herald, Dec., 1894.

A Practical Lesson in Poultry.—The following from a Canada farmer and reported from the Ottawa station, will be read with interest by readers who desire to know what a small number of hens will do when well cared for and fed.

Eggs laid by fifteen Plymouth Rock hens:

January	214
February	144
March	283
April	280
May	240
June	211 one hen killed.
July	197
August	187
September	130
October November	75 hone molting
November	4 \interest morning.
December	37
Total 2,	002

Total cost of feed for the year, \$17.90.

Four of the hens raised thirty-nine chickens. The cost of the chickens' feed is included in the above amount.

One of the pullets began to lay when five months and three days old.

The brown leghorns are regarded by many as one of the best breeds for eggs. They are non-setters, and good foragers and long lived. A good, well-bred hen will lay from 200 to 240 eggs per year. For cold climates the rose-combed should be selected. Every hen should net to the owner from \$1.00 to \$2.00 per annum.—

Exchange.

Boys and Girls who are now attending school, should bear in mind that if they expect to graduate with honor and distinction, they must refrain from the use of tea, coffee., tobacco, and all alcoholic stimulants. During the last sixty years no student of Yale or Harvard, or other Eastern college, has ever graduated at the head of their class who has indulged in these things.—Juvenile Instructor, 1894.

Bad Breath.—Remedy for bad breath: Take after each meal one teaspoonful of the following mixture: Chloride of soda, 1 oz.; liquor of potassa, 1 oz; phospate of soda, 1½ oz.; water, 3 oz.—Edison's Encyclopaedia.

Blood.—To purify the blood—A well-known physician says that he considers the following prescription as the best he has ever used: Yellow dock, 1 oz.; horse raddish, ½ oz.; hard cider, 1 quart. Dose, a wineglass full four times a day.—National and Family Cyclopaedia.

BLOOD PURIFYING ROOTS.—Liquorice root, sasafras root, sarsaparella root, native mountain grape root, native Indian root, native yellow burdock root. The leaves from the "Yellow burdock are long and narrow, and of a beautiful dark-green color." In the spring of the year they may be gathered and used for greens, as a substitute for spinage. Dr. Benedict says "Were the leaves of the yellow burdock more widely known, and more generally used as an article of food for greens, there would not be so many calls for drugs."—*Editor*.

Burns and Scalds.—Fresh lime size of an egg, boiling water, one quart. Mix. Settle for some hours, skim and drain off the clear lime water, and add an equal quantity of raw linseed, or olive oil. Bottle and shake.

Should be labeled and kept on hand for use. Apply on strips of soft linen or muslin, and laid over the parts burned and covered with oiled silk or cotton or wool batten. One of the best and most soothing of all applications.—New York Medical Record, Nov., 1894.

Burns.—Carbon Oil for Burns and Scalds.—Mix equal parts of raw linseed oil and lime water. Shake together thoroughly and apply constantly on a linen cloth.—Exchange.

Bunions.—To cure: Paint them night and morning with tincture of iodine.—Fray's Golden Receipes.

Blackberry Brandy.—United States Sanitary receipt for making blackberry brandy: Ten quarts of blackberries make one gallon of juice. To one gallon of juice add four pounds white sugar. Boil for a few minutes and skim it. Add one oz. ground cloves, one oz. ground cinnamon, one-half oz. ground alspice, and eight grated nutmegs. Boil again for a short time. When cool add 1 quart of best whiskey or brandy. Bottle and cork close. It is fit for immediate use.—
U. S. Dispensatory.

Brights Disease.—One half ounce sweet spirits of nitre, one half-ounce spirits of turpentine, one half-ounce oil juniper, one half-ounce alcohol. Mix. Dose, ten to twelve drops on lump sugar.—Hall's Journal of Health.

Blacking.—Water-proof varnish-blacking, for leather, carriage tops, harness, boots and shoes, etc. Formula: Olive oil, eight ounces; ivory black, one ounce; one ounce bees wax. Dissolve in four ounces of turpentine. Mix all together. Bottle and cork, and apply when required.—Scientific American Cyclopaedia.

Bloating In Cows.—Preventative: No. 1.—Before turning them out to pasture, place upon them an old bridle. The bit in the mouth causes them to eat more slowly, averting the danger of bloating.—American Agriculturist.

Bloating In Cattle.—No. 2. Give one pound Epsom salts, with four ounces cream of tartar, repeating the dose if found necessary.—Scammel's Cyclopaedia.

No. 3.—The volatile spirit of ammonia gives instantaneous relief, its action being chemical in decomposing the gas generated in the animal's stomach by fermentation. Dose for cow or ox, one tablespoonful. For a sheep, one teaspoonful diluted in a little water. If not effectual, repeat the dose. Keep a small bottle of the above on hand ready in case of emergency. Keep securely corked and labeled.—J. C., Sandy City.

No. 4.— One half-ounce chloride of lime to one halfpint of gin or water. Bottle and shake. If found necessary repeat the dose in one hour.—H. J. Faust.

Bluing.—Formula: No. 1.—Take one ounce soluble Chinese or Prussian blue, powdered and put into a bottle with one quart of clear rain water, acidulated by one-fourth ounce oxalic acid. The acid dissolves the blue and holds it evenly in the water, so that specking will never take place. A very small portion suffices for a large amount of clothes. Easy to make and economical.—

Scientific American Cyclopaedia.

No 2.—Take a few lumps of raw indigo, tie tightly in a little bag and allow to soak for a short time in cold water. It is the best and cheapest.—British and Colonial Druggist.

Bluing For Laundry Use.—No. 3. Dissolve indigo sulphate in cold water and filter through muslin.— Scientific American Cyclopaedia.

Bugs.—A strong decoction of red pepper applied to bedsteads will either kill the bugs or drive them away.—
Scientific American Cyclopaedia.

Cologne Water.—Take a pint of alcohol and put in thirty drops of oil of lemon, thirty of bergamont, and one half-gill of water. If musk of lavender is desired, add the same quantity of each. The oils should be put in the alcohol and shaken well before the water is added. Bottle it for use.—U. S. Dispensatory.

Coffee.—Substitute for coffee: No 1.—Rye or wheat roasted along with a few almonds; a very small quantity of Cassia buds improves it. A good substitute.

BEET ROOT COFFEE.—No. 2. From the yellow beet root, sliced, and dried in an oven and ground with a little foreign coffee. Good substitute.—Scientific American Cyclopaedia.

No. 3.—Take three-fourths pound of rye, barley, or wheat, and one-fourth, pound of best coffee, mix and brown; grind when wanted. More healthy and better than all coffee.—Dr. Chase's Receipt Book.

No. 4.—Dandelion root, dug when in flower, chopped up and browned in the oven, and ground coarsely. Makes a most excellent substitute for coffee.—

Local Item.

Cream.—Substitute for cream: Beat two or three eggs in a basin to a stiff froth; then pour over them, gradually, to prevent curdling, boiling hot tea, until the thickness of cream. It is difficult, from the taste, to

distinguish the composition from rich cream.—Scientific American Cyclopaedia, 1893. McKenzie's Ten Thousand Recipes.

Cross Child.—For a cross child, give it one teaspoonful of dill water and one of lime water, in a little milk, which quickly soothes it; or, half-an-ounce of ground ginger, half an ounce of magnesia and a quarter of an ounce of Turkey rhubarb, mixed in cold water. Give one teaspoonful as required.—Fray's Golden Recipes.

Children.—Healthy children: To have rosy healthy children, give them plenty of apples and scalded milk, and but few sweetmeats. Worth the highest recommendation.—Prof. E. Fray, London.

Croup.—To which children are very subject is dangerous. One of the best and simplest remedies is to beat up the white of an egg and sweeten with sugar. In very severe cases a little powdered alum may be added, or a little lemon juice. Simple and effective and not generally known.—Hall's Journal of Health.

Coughs and Colds.—Most useful: Severe colds are cured by drinking freely of herb yarrow tea, sweetened with molasses, on going to bed. Tickling coughs are quickly cured with one ounce of honey and one tea spoonful of paregoric, mixed with the juice of a lemon, and taken going to bed.—E. Fray.

Colds.—A simple but effectual way of breaking up a cold: Five grains of nitre (saltpeter) taken in a glass of water, the body being wrapped in extra clothing, will excite a gentle perspiration for the entire night, and this treatment will break up a cold, if employed at its first onset.—Techno Chemical Receipt Book.

"If well, avoid prespiring; if sick, seek to perspire."

—Italian Proverb.

How to Cure a Cold.—Before retiring soak the feet in mustard water, as hot as can be endured. The feet should first be plunged in a pail of luke-warm water, adding by degrees very hot water until the desired heat is attained, protecting the body and knees with blankets, so as to direct the vapor from the water to induce a good sweat. Next, to two tablespoonfuls boiling water add one tablespoonful sugar and fourteen drops of strong spirits of camphor. Drink the whole and cuddle in bed under plenty of bedclothes and sleep it off.—Moor's 1,000,000 Receipts.

Dr. G. Johnson, Professor of Medicine in King's College, London, gives the following simple cure for a cold, headache, pain in the limbs, etc.: Simply open the pores by exciting the action of the skin, by wrapping the undressed patient in a sheet wrung out of warm water, then over this folding two or three blankets. The patient may remain thus packed for an hour or two, until free perspiration has been excited.

COLD IN THE HEAD.—Dr. Pollion, of Fance, recommends the inhaling of hartshorn for curing colds in the head. Inhale by the nose seven or eight times in five minutes. Spirits of camphor may be used in the same manner, with beneficial results.—Dick's Encyclopaedia.

Cough Syrup.—Very valuable: Paregoric, $1\frac{1}{2}$ oz.; tincture of capsicum, 1 dr.; tincture of tolu, 3 ozs. Dose, a teaspoonful every three hours in a little water.—Dr. Chase.

Union, December, 8, 1894. Chills and Fever.—Mrs. Phelinda Cole, a highly

esteemed lady, of the above place, formerly of Otsego, Michigan, suffered every other day for some eighteen months with chills and fever, from which she could get no relief. Finally one day late in October, of 1849, while returning home in company with her husband from a visit to her mother, she shook with the disease like an aspen leaf, being almost famished with thirst, and her tongue swollen. When on rising the brow of a hill in a point of woods, she spied a wild vine growing, and clinging to a young sapling, which contained numerous clusters of small frostbitten berries some of which she begged her husband to secure, which she ate with avidity, and to her great joy and relief her chills and fever left her, and has never since returned.

Ever since the above remarkable cure, furnished by Divine Providence, Mrs. Cole has recommended the same to very many who have been afflicted, and has never heard of a single failure in effecting a cure. Her husband, William B. Cole, Esq., verifies the above statements.

A cure so simple and valuable should be more universally known. See Fever.—Editor.

Chilblains.—If not broken, rub them often with flour of mustard and brandy; if broken, wash them with tincture of myrrh and a little water.—Edwin Fray, London, England.

Cancers.—A recipe worth a fortune: Cancer or cancerous sores and cutaneous affections, if taken in time, nine times out of ten may be cured by the use of red clover tops, to be used in the manner of tea. To be drank freey during the day, and wet a cloth in the tea; this apply to the cancerous sore.—Edwin Fray's Golden Recipes.

Constipation and Bilious Attacks may be cured by drinking a teacupful of hot water, boiled, before breakfast and just before retiring. Hot lemonade is invaluable. Stewed prunes are also invaluable to those of costive habits, which act as a gentle medicine. Followed up for a few months, it works wonders with the most delicate constitutions.—Fray's Golden Recipes.

Canker Cure.—Equal parts of borax, saltpeter and loaf sugar, rubbed well together. Put a small pinch of this powder into the child's mouth three times a day.—

The Home Guide.

Canker.—Garden sage, three handfulls, raspberry leaves, one handful; golden seal powder, ten cents worth; chlorate of potash, ten cents worth; rhubarb, ten cents worth; sulphur, five cents worth; alum (burnt), five cents worth; borax, five cents worth; babery powder, ten cents worth; pinch of salt and cayanne; one grated nutmeg; one pound of honey. Boil leaves in three quarts of water fifteen minutes; strain, and add other ingredients, and boil again for a few moments. Bottle tightly for use. Dose, one spoonful on an empty stomach twice a day.—Mrs. Mary A. Shaw, Union.

Cider Keeper.—For keeping cider and other fruit juices, salicylic acid has been proven to be the best. It may be put up in packages of three-quarters of an ounce each, which is sufficient to keep a barrel (forty-five gallons) of cider. It is to be added when the cider is "just right," and should be mixed with a gallon of cider before adding to the remainder, and then thoroughly mixed with the whole. For keeping wine, etc., it should not be added until after fermentation has ceased.—Fenner's Druggists' Formula.

Cement.—LIQUID CHINESE CEMENT.—Formula: Take of finest pale orange shelac (broken small), 4 parts; or 4 oz., best alcohol 3 parts, or three oz., and digest them together in a corked bottle, in a warm place, until disolved; shake well. It should have about the consistency of molasses.

The above formula, known as Chinese cement, produces a cement for porcelain, glass, fancy work, jewelry, crockery, furniture, wood, etc., so strong that wood or crockery can be joined so firmly that they will break anywhere else rather than where cemented. In mending crockery, the less cement used the better; for wood use more freely. Press articles to be mended firmly together with the hands for a few seconds, and if necessary bind with twine, and give from one to two days to harden. Should cement thicken, add a few drops of alcohol, and shake. Keep well corked. Apply with soft wood splinter or camel hair pencil.—Edison Cyclopædia.

Sold by agents at the rate of \$4.00 per pound; cost when made at home, from 75 cents to \$1.00 only.

CEMENT-LEATHER.—Guttapercha, 1 lb.; caoutchouc, 4 oz.; pitch, 2 oz.; shellac, 1 oz.; linseed oil, 2 oz. Melted together. Must be melted before being applied. Used for uniting leather or rubber.—Fraser and Chalmers.

Cash Crops.—The following note is from a farmer in Michigan. He lives in a regular farm neighborhood where the ordinary farm crops are mostly grown. Wanting some more profitable crops than hay, grain, or potatoes, this man set out strawberries and small fruits. Here is what he says:

"I find this business the most profitable of anything I ever tried. I was afraid I could not sell half my crop

this year on account of the hard times; but my neighbors flock around and take most of them right here, and pay the spot cash and no growling—which they would not do or grain, hay stock, dairy product, for any other farm products except fine fruits.

"There is the situation in a nutshell as you would find it in many a farm neighborhood. It is certainly an advantage to raise cash crops, and it will be difficult to find one that will 'take' better than fine fruit—even in a farming district.

"One of my neighbors declares that he finds more pleasure and profit from his three acres of small fruits than he does from the balance of his forty-acre farm."

Chimneys.—Cure for Sooty: Plaster the inside with salt mortar. The proportions used are one peck salt, added while tempering, to three pecks mortar. Chimneys thus treated have remained perfectly clean for fifteen years.—Treasure House of Usetul Knowledge.

Condition Powders.—As a rule horses and other animals that are well cared for, need no medicine of any kind to preserve them in good health; but in case of bad health, or in spring and fall, you may give for eight or ten days the following tonic and blood purifying powders: Ground ginger, two oz., gentian, two oz., sassafras, two oz., saltpeter, two oz., rosin, two oz., gum myrth two oz., golden seal two oz., salt, one oz., sulphur, six oz. Mix thoroughly and keep in well-stoppered bottles. Dose, one tablespoonful in bran mash twice daily. Especially valuable in all chronic diseases, as mange, distemper, poll evil, yellow water, etc. It will show its beneficial effects very quickly. Flaxseed or oil cake will give a sleek coat to horses. Keep in manger a good

sized lump of asafoetida to ward off disease. Bran mash is an excellent, mild and safe laxative.— Horse Jockey.

Dover's Powder.—Ipecacuanha, in powder, 1 drachm, powdered opium, 1 drschm, sulphate of potassa, one oz., or instead of the sulphate of potassa, use one oz. powdered saltpeter. All well mixed. Dose, from eight to twenty grains. Used to break up all kinds of fever.—U. S. Pharmacopoeia.

Distance for Planting.—No. 1. The distance apart for planting fruit trees is, in some other States, recommended as follows:

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Apples......25 to 30 feet, each way.
Pears.......20
                    25
Plums ......20
                    24
Prunes ......20
                    24
Peaches .....20
Cherries .....20
                    25
Apricots .....20
                    24
                 " 24
Nectarines ...20
                  " 12
Ouinces ..... 8
                   12
Grapes .....
                     5
Currants.....
Gooseberries .. 5
                 by 6
Raspberries ...
                     7 to 6 by 8 feet
Blackberries ...
    each way.
Strawberries .. 2 by 3 or 4 feet each
    way.
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Number of Trees or Plants per acre.—No. 2. To find the number of plants required to set an acre, multiply together the two distances, in feet, at which the trees stand apart, and divide 43,560 by the product. The quotient will be the number of plants required for the square form of planting. Add one-seventh of the

quotients to itself and the sum will be the number of plants required for the circular form.—Thos. E. Vissing, Assistant Secretary Utah's State Board of Horticulture.

Derangement of the Bowels.—White of an egg stirred into a tumbler of hot water.—Dr. Kellog.

Diarrhea.—No 1. The following excellent remarks on this disease are extracted from Dr. Hall's Journal of Health: Cholera is nothing more than exaggerated diarrhea. The most important item in the arrest and cure of looseness of the bowels is absolute quietude on a bed. The next thing is, to eat nothing but rice, parched like coffee, and then boiled, and taken with a little salt and butter. Drink little or no liquid of any kind. Bits of ice may be eaten and swallowed at will. Flannel bandages are good. Gratifying results will follow these observances.

No. 2. Remedy for Summer Complaint.— A tea made of the seeds of the sunflower, roasted like coffee berries, is an admirable remedy for all species of summer complaint. One half-pint of the seed is sufficient. It should be remembered, however, that serious results often follow the two sudden stoppage of diarrhea by astringents, and with this, as all remedies of a similar nature, caution should be used.—Dick's Encyclopædia.

Disintary.—Subnitrate of bismuth: A white powder. In use by all physicians and very popular. Dose, from four to ten grains, at intervals from two to four hours.—Dr. Price.

Deafness, a Cure for Temporary.—If deaf from hardened wax in the ear, a mixture of sassafras, oil, ten drops, glycerine, one fluid drachm, olive oil, one-half fluid ounce may be dropped into the ear every day. Inject

warm water into the ear by means of a proper syringe the head being placed with that side upwards during the operation.—Dirk's Encyclopædia.

Note.—Some years ago a New York merchant paid a physician \$1000 for the warm water treatment.—Edutor.

Diphtheria.—Cure for Diphtheria: No 1. The Scientific American, 1894, gives this recipe which the whole world ought to know: At the first indication of diphtheria in the throat of the child make the room close; then take a tin cup and pour into it a quantity of tar and turpentine, equal parts. Then hold the cup over the fire so as to fill the room with the fumes. The patient on inhaling the fumes will cough and spit out the membraneous matter and diphtheria will pass off. The fumes of tar and turpentine loosen the matter in the throat, and thus afford the relief that has baffled the skill of physicians.—

Remedy for Diphtheria.—No 2. A gentleman who has administered the following remedy for diphtheria says that it has always proved effectual: Take a tobacco pipe, place a live coal in the bowl, drop a little tar upon the coal, and let the patient draw smoke into the mouth and discharge it through the nostrils. The remedy is safe and simple.—Dick's Encyclopædia.

DIPHTHERIA CURE.—No. 3. An eminent physician says: I have found sulphur an infallible cure for diphtheria. It can be put in water as a gargle, blown down the throat through a quill, or burned, the patient breathing the fumes. Florists tell me that sulphur kills a fungus growth, and we are told that is what diphtheria is. We have seen it work almost miracles in the stay of this slayer of our children.—London Lancet.

Dyspepsia.—No 1. Dyspepsia may be cured by the free use of oysters.—E. F.

No 2. Persons suffering from dyspepsia should take only plain, nutritious food, such as fresh meat, fresh vegetables, stale bread, milk, etc. Avoid pastry, fats, tea and coffee, fresh bread and hot dishes. Also take the following: Sulphate of magnesia one ounce and a half, carbonate of magnesia two drachms, syrup of ginger one ounce, water to make six ounces. Take a tablespoonful night and morning.—Medical Practitioner, Family Herald, Dec. 4, 1894.

Dropsy and Diseases of the Kidneys and Urinary Organs.—No 1. Parsley made into tea: two or three teacups three or four times a day is one of the very best remedies.—Dr. Gunn.

No 2. A decoction of the inside bark of the elm—shippery elm—drank freely, takes away water in dropsy.—Fray's Golden Recipes.

NOTE.—It is claimed by some people that the small, native red bull, or squaw berry, when made into tea and drank freely, will cure the dropsy. Try it.—Editor.

Disinfectant.—Tar makes a good disinfectant, but the most powerful disinfectant to clear a house from sickness is fresh ground coffee, which even overpowers musk. Nothing, however, is superior to the sunshine of heaven.—Fray's Golden Recipes.

Dehorning.—The authorities of the Cornell Agricultural Experimental Station have practiced "Dehorning of their cows for some six or seven years, and at present there is no animal having horns on the farm." It is claimed that "dehorned cattle fat more readily. De-

horning quiets the animals and makes them more docile and easier to handle, and that the cows invariably give more milk."

Extract Jamaica Ginger.—Formula: Best unbleached Jamaica ginger, crushed, three ounces; freshly grated lemon peel of one lemon; best proof alcohol, one pint; powdered mace, one-fourth ounce; one teaspoonful of sugar; oil of lemon, two or three drops; digest in a closely stoppered bottle for ten days. Filter.—Druggists' Formula, Scannel's Work.

Extract of Lemon.—Formula: Oil of lemon, six parts, or one ounce; lemon peel, freshly grated, three parts, or one-half ounce; best alcohol, one hundred parts, or one pint. Place all in a closely stoppered bottle and macerate for twenty four hours or more, filter through paper or muslin if thought desirable.— U. S. Dispensatory, late edition.

Extract of Vanilla.—Formula: Cut up fine, vinilla beans, one ounce; grind in mortar with two ounces of loaf sugar; mix eight ounces of rose water, and twenty-four ounces of alcohol. Add a portion of the vanilla and sugar, and shake. Add again diluted alcohol, a part of the twenty-four ounces. Bottle.—Scientific American Cyclopaedia.

Extract of Raspberry.—Formula: Put one pound of fresh berries, mashed with a wooden spoon, into a bowl with one-fourth pound of loaf sugar; bottle and add one pint diluted alcohol. Raspberries make the best extracts. For home use do not filter.—Moor's One Million Facts.

Perfume of Rose.—Formula: Dissolve one-half fluid drachm of otto of rose in a pint of cologne spirits,

macerate one-half ounce of red rose leaves in the solution until the extract is of the desired depth of color, filter and bottle tightly.—U. S. Dispensatory.

Eggs.—How to Boil for Health: Put the eggs into a dish with a cover, and then pour upon them boiling water, two quarts to a dozen eggs, in a covered tin pail, and set them away from the stove for fifteen minutes. The heat of the water cooks the eggs slowly and evenly Cooked this way they taste better and richer, and are more wholesome.—Dr. Chase.

- No. 1. To Tell Good Eggs: Put them in water. If the large end turns up they are not fresh. Infallible rule.—American Agriculturist.
- No. 2. To DISTINGUISH GOOD EGGS: To ascertain whether an egg is good or bad, hold it up to the light. A good egg is translucent, but a bad one is perfectly opaque. The difference is as easily perceived as that between a blue egg and a white one.—Dick's Encyclopædia.

Substitute for Eggs: In winter, snow can be used as an excellent substitute for eggs in puddings, pancakes, etc. Two large spoonfuls will supply the place of one egg, and the article it is used in will be equally good. It should be fresh fallen snow, or under layers if old. The exposed surface loses its ammonia by evaporation very soon after it has fallen, and it is the ammonia contained so largely in snow which imparts to it the rising power.—Guide for the Millian.

SAVE YOUR EGGS: In winter when eggs are scarce and dear by mixing in with those you are beating a little fresh snow, one-third the eggs otherwise required in cooking may be saved. "A penny saved, a penny earned."—Exchange.

Eggs.—To Preserve: Eggs when newly laid are almost perfectly full, but the shell is porus, and the watery portion of its contents begins to evaporate through its pores the moment it is exposed to the air, so that the egg becomes lighter every day. To preserve the interior of the egg in its natural state, it is necessary to seal up the pores of the shell air-tight. This may be done by dipping them in melted suet or olive oil. They are then packed in bran, oats, meal, or powdered charcoal.—Dick's Encyclopædia.

No. 2. The following method of preserving eggs, recommended by Messrs. Munn & Co., of S. A. C., may be used: New laid eggs can be kept unaltered for months by being placed for one-half hour in a cold solution of salicylic acid, eight teaspoonfuls of acid to one gallon of water, then allowed to dry in the air, and as usual stored in a dry, cool place.

Eyes.—Rose-leaves, made into decoction, are good used as a bath for sore eyes.—*E. F.*

Eye Water.—A golden remedy; said to have cost originally \$500. Formula: One teaspoonful common Japan tea steeped in one ounce of water, strain and add one teaspoonful common glycerine; and one teaspoonful of rosewater, made from the leaves of fresh roses.— Welch Physician.

Erysipelas:—No. 1. Erysipelas is a well known deathly complaint; regarded by some physicians as contagious, which may be cured by two sprigs of wormwood, a quarter of an ounce of senna, and a quarter of an ounce of camomile flowers to a pint of boiling water, and drink freely. Tried with speedy relief.—

Fray's Golden Receipis.

- No. 2. A Mrs. Church, of Shady Grove, Tenn., recommends very highly, anointing the parts with olive oil, and the application of a good, thick pad of bread dough. Simple and effective. Repeat if necessary.
- No. 3. One tablespoonful buckwheat flour to one pint sour buttermilk. Mix cold. Wet cloths in solution, ring out, and apply to parts affected every hour, using extra cloths to bandage.—Mrs. Isabella Workman, City.

Earache.—No. 1. M. Emile Duval says that he has, in person, found relief in severe earache, after other things had been tried in vain, from the use of a mixture of equal parts of chloroform and laudanum; a little being introduced on a piece of cotton. The first effect produced is a sensation of cold; then numbness, scarcely any pain and refreshing sleep.

No. 2. Take a small piece of cotton batting, make a depression in the center with the finger, and fill with a small amount of ground pepper; gather it into a ball and tie it up; dip the ball into sweet oil, and insert it in the ear, covering the latter with cotton or wool, using a bandage to retain it in place. Almost instant relief will be experienced. One part laudanum and six parts sweet oil dropped in the ear is also very effectual.

— Dick's Enc.

Elixir of Life.—The sunbath is one of the cures of nature which is greatly neglected by those who especially need it. The ancients recognized the value of the sun's rays as a health restorer, and we find accounts in their literature of how they would stay out in the open sun all day to cure rheumatic tendencies, weakness and nerve troubles. Later the philosophers of the

middle ages recommended the sunbath as the greatest elixir that could be administered. When systematic sunbaths are given to rheumatic patients affected cures have been known.—*Zion's Home Monthly*.

Emetic.—Simple Emetic: Half a glass of warm water, one heaping teaspoonful of salt, and another of mustard. The materials are usually to be had at a moment's notice, and form a very efficient emetic.—Dick's Encyclopedia.

Engraving Fluid.—Formula: The following is an easy and effective means of engraving names on steel knives, tools, etc: Protect the steel with a thin layer of wax, tallow or soap, by warming the tool and applying the wax, tallow or soap. Allow it to cool and when the wax is hard, write the name on it with a pointed instrument, so that each stroke penetrates to the steel, then pour some nitric acid over the wax surface, let it stand for a short time, and after washing off the acid with water, heat the tool till the wax melts and wipe it dry. The name will appear engraved distinctly on the steel, the depth of the letters depending on the length of time the acid has been allowed to remain in contact with it.—Canadian Family Hearld and Star, Nov. 1, 1893.

Farm.—Interesting the children in the farm: Teach the children when young to be careful of their own, and of the rights and property of others, by giving each one a place to keep his own small belongings and keepsakes, which though they may seem small to the older ones, are dear to the hearts of the little possessors. I have in mind a mother who, when her children were quite young, gave each one a drawer in a large bureau in which to keep his things. They were shown how to

keep them in order, and were expected to keep them so. They were also taught to respect each other's rights, and not to help themselves to anything, no matter how small, belonging to another without first asking permission of the owner. If all children were taught at an early age to respect the rights of others in every way, the habit of carefulness and thoughtfulness for the rights and liberty of others would become a fixed one.

Let the children have something of their own, worthy of the care and attention bestowed upon it. Almost all children like to plant and care for flowers. Stake off a little spot of ground for each one to work and plant for his own. Do not use some spot of ground that no one else cares for, or some shaded spot where nothing will grow. Be sure that the soil is good, so that in due time their labors will be rewarded and they will not be discouraged from trying again. All healthy children are full of life and energy, and are always busy, either at work or at play. If this energy only be turned in the right direction, there may be much accomplished, even by children. Give them a few small fruit trees or ornamental shrubs, and show them how to plant them, and see how carefully they will be watched and cared for. When the children have grown older. and their trees become fruitful, let them gather the fruits of their labors, and have the proceeds of the sales. Some nut trees or choice grape vines may be given them, or some rosebushes or shrubs; whatever it is, let it be of the best. Let them work at their own sweet will, knowing that only by their own work and care is the prize in view gained.

In this way they are given more interest in the farm, feeling that they are laborers together with their parents

and not merely helpers. In after years, when the little hands that have planted and tended with so much care are, perhaps, gathering fairer flowers and richer fruits in a fairer land, or it may be, have left the old home nest for homes of their own, we shall realize that he who plants a tree not only benefits mankind, but, in so doing, erects a monument to himself.—F. A. H., Farmers' Advocate.

Elderberry Wine.—No. 1. Take of fresh Elderberries 1 quart, soft water 4 quarts, raisins 3 lbs., red tartar in fine powder, one-quarter of an ounce, mix ginger in powder, one-quarter of an ounce, cinnamon, cloves and mace, of each one-eighth of an ounce, one-fourth of an orange or a lemon peel and juice. Then add one-half pint brandy. This will make over one gallon.—McKenzie's Ten Thousand Recipes.

No. 2. Remove the stems from twenty-five pounds of elderberries; crush and boil them; then add twelve-and-a-half pounds of sugar, one-half pound of cream of tartar, and nine gallons of water, and let the mixture ferment. By adding a little ginger, cloves, raisins and yeast, it will yield at the termination of the fermentation wine similar to Cypress wine. Used for disentary and for medical purposes. — 2 echno Chemical Receipt Book.

Food.—In Spain and Portugal onions are used as staple articles of died. Prof. Johnson states that the onion contains from 25 to 30 per cent. of gluten. It ranks, as an article of food, with the nutritious pea. Onions possess valuable medicinal properties, and the moderate use of the bulbs, either cooked or raw, is generally soothing and beneficial.—Domestic Science, by J. E. Talmage.

Percentage of Nutrition in Various Articles of Food:

Beer or porter, from	1 to 2	Roast poultry	26
Raw cucumbers	2	Raw beef	26
Raw melons	3	Raw grapes	27
Cabbage	7	Raw plums	29
Boiled turnips	9	Broiled mutton	30
Currants	10	Fat pork	51
Milk, fresh	13	Cheese	70
Buttermilk	13	Oat meal porridge	75
Carrots	14	Rye bread	79
Beets	14	Oat meal	85
Apples	16	Dried bacon	85
Parsnips	19	Boiled beans	87
Peaches	20	Buckweat	87
Boiled codfish	21	Boiled rice	88
Whipped eggs	22	Barley bread	88
Boiled venison	22	Wheat bread	90
Salmon	23	Baked corn bread	91
Potatoes	23	Boiled barley	92
Fried veal	24	Butter	92
Roast pork	24	Boiled peas	93
Eggs, boiled	25	Raw oils	95
		Sugar	96

-Edison's Encyclopaedia. M. S. Ayer & Leatherby.

Oats are in some parts of the world more extensively used as food for men than in this country. In nutritive value, that is as a flesh producer, oat flour excels all other preparations of the kind. Oats are rich in oily matter. Meal from oats is used mostly in porridge or gruel, though oat cakes are esteemed by those who have learned to know their merits. — Domestic Science, by J. E. Talmage.

One pound of oatmeal gives a man as much strength as three pounds of lean beef.—Prof. Fray, London, Eng.

Invalid's Food: Slippery elm is invaluable food for invailds or delicate persons, and for infants and children. As one physician truly said, it is worth its weight in gold. Simply mix one teaspoonful of elm flour with one teaspoonful of sugar, add a little milk to make it into a smooth paste; then add hot water, stirring it quickly, till it becomes a proper consistency.—

E. F.

POTATOES: From the standpoint of economy and wholesomeness, the best methods of cooking potatoes are roasting and steaming; by either processs the contained juices are raised to the cooking temperature, and are absorbed by the swelling starch particles. If boiled at all, the least injurious way is to cook them with their skins still in place, leaving the peeling for a subsequent operation. On the average, potatoes contain from 76 to 80 per cent. of water. A potato diet is at best a very poor one. *Domestic Science, by J. E. Talmage.

Prof. Forister claims that in peeling the potato before cooking 25 per cent of the starch and nutrition is lost.

Flies.—TO KEEP OUT FLIES: No. 1. A medical journal offers a suggestion for keeping out those nuisances—flies. Expose a little oil of bay in a saucer on your window sill, or coat your doors and windows with any color of paint you like, containing as little as four per cent. of oil of bay, and not a single fly will enter your house.—Our Dumb Animals, Boston, Sept. 1894.

No 2. Flies disappear by placing a plate in the rooms with a mixture of cream, pepper and sugar on it.—
British and Colonial Druggist.

Fruit and Egg Preserving Powders.— Fruits jams, jellies, juices, pickles, etc., put up in the usual way, (with much less sugar) but with the addition of one drachm (or one teaspoonful) of salicylic acid to four pounds, will keep sound and sweet, with absolute certainty for an indefinite time, fermentation and spoiling being thus averted. Dust also a very little of the dry acid underneath the covers, just before sealing. New laid eggs can be kept unaltered for a long time by being placed for one-half hour in a cold solution, eight teaspoonfuls of acid to one gallon of water, then allowed to dry in the air.—Scientific American Cyclopaedia.

Fruit. -A NEW, ECONOMICAL, LABOR-SAVING WAY OF PUTTING UP FRUIT. "A PRONOUNCED SUCCESS:" No. 1. To every eight pounds of good, sound, ripe fruit, placed gently in peserving kettle, add one pint of boiling water. cook for ten or fifteen minutes, or until tender, avoid stirring, but skim if necessary. Now measure out from one to two quarts of sugar, gaging the amount in keeping with the sub-acid in the fruit; place same in shallow pan, and heat in the oven, not too hot, until the sugar browns and melts a little. When the fruit is done pour the sugar into it, and let it cook for a few seconds only, in order to allow fruit and sugar to assimilate; then while still boiling hot put into hot bottles taken from hot water, and at once securely seal and put in a cool place. In this method the fruit will retain its form and its juices, the color will be as delicate as the flavor will be rich and fruity. The fruit does not shrink and cook away as in the old-fashioned way.

If half preserves is desired, increase the amount of sugar. The fruit will not burn or stick on the kettle,

and best of all, one-half hour is all the time required for the whole job.

In making jellies, boil the juice from twenty to thirty minutes, add the heated sugar from the oven, bottle and seal.--Mrs. Francis M. Richards, Deseret News.

Note. By dusting a very little dry salicylic acid underneath the fruit jar covers, just before sealing, will aid materially in keeping the fruit from spoiling. Sold by runners at \$1 per oz.; cost at druggists 10c only.—

Scientific American Cyclopaedia.

Fruits possess qualities and virtues not known to chemistry. Their juices need no filtering or boiling, and never convey the germ of disease. They pass through the tissues of the body very easily, leaving their salts of potash, soda, etc., taking up the debris of the body and carrying it off. Their acids are refreshing, their salts stimulating, and their flavors are a boon to the nervous system.

There is scarcely a disease to which the human family is heir but that the suffering therefrom would be greatly relieved, or entirely prevented, by the free use of fruits, which are now so generally forbidden. In the treatment of scarlet fever and diphtheria our summer fruits are very useful. There is hardly a disease that is accompanied with fever but that grapes and bananas may be freely given to the patient. In the treatment of dystentery, ripe fruits especially peaches, should be preferred to any medicine.—Hints on Diet Reform. M. S. Ayer, Boston, Mass.

To Make Sour Fruit Sweet Without Sugar: To two pounds of fruit when cooking, add one tea-

spoonful of soda. It is much cheaper than sugar. — Mrs. A. F. T. Va. In Modern Cook Book.

Flaxseed Tea. — Flaxseed, one ounce; crushed licorice root, one-half ounce; lemon juice, four table-spoonfuls. Pour over the above one quart boiling water and simmer for one hour. Strain and bottle.—Exchange.

French Honey.—Formula: White sugar, one pound; six eggs, leaving out the whites of two; the juice of three or four lemons, and the grated rind of two; one-fourth pound of butter. Stir over a slow fire until it is of the consistency of honey.—*Moor's 1,000,000 Facts*.

French Polish for Furniture.—Formula: Take 12 oz. of alcohol, add one-half oz. sulphuric ether, one-half oz. of balsam fir, and one-half oz. tincture alknett, then add 4 oz. best gum shelac, broken fine; place bottle in warm place and shake. When the gum is dissolved add 3 oz. raw linseed oil. Apply to furniture with a canton flannel cloth; polish with linen cloth. When applied with a brush it is an excellent substitute for paint.

This receipt was procured from the originator, a French chemist, at a great cost.

Felons.—To Cure: As soon as the part begins to swell, get the tincture of lobelia and wrap the affected part with a cloth saturated with the tincture, and the felon is dead.—*Mine of Wealth*.

Freckles.—A New Process for Removing Freckles: Take finely-powdered nitre (saltpeter) and apply to the freckles by the finger moistened with water and dipped in the powder. When perfectly done and judiciously repeated it will remove them effectually and without trouble.—Mine of Wealth.

Feet.—Care of the Feet: Many are careless in the keeping of the feet. If they wash them once a week they think they are doing well. They do not consider that the largest pores are located in the bottom of the foot, and that the most offensive matter is discharged through the pores. They wear stockings from the beginning to the end of the week without change, which become perfectly saturated with offensive matter. Ill health is generated by such treatment of the feet. The pores are both repellants and absorbents, and foetid matter is taken back into the system. The feet should be washed every day with pure water only, as well as the armpits, from which an offensive odor is also emitted, unless daily absolution is practiced. Stockings should not be worn more than a day or two at a time

They may be worn one day and then aired and sunned and then worn another day if necessary.—Zion's Home Monthly, Nov., 1894.

Feet.—To Wash: The neglect of washing the feet is often visited by a quarrelsome temper and other bodily complaints.—Edwin Fray, England.

COLD FEET REMEDY: People troubled with cold feet should dust a very small quantity of cayanne pepper in their shoes. By following this practice up for a few weeks, cold feet will be a thing of the past. The general health will also be much improved.—Mrs. Mary A. Shaw, Union.

PERSPIRING FEET: The unpleasant odor from perspiring feet may be prevented by sprinkling oat meal in the socks, as used in the army; or sprinkled

bran in the socks occasionally.—Fray's Golden Recipes; England.

FEET—TO KEEP WARM: "Keep your feet warm and your head cool and you will receive but few doctors bills."—*Exchange*.

Cold feet are the precursors of many forms of illness.—Domestic Science, by J. E. Talmage.

COLD FEET: Sometimes cold feet come from overaction of the brain. In such a case use the brain less and the feet more.—*Prof. H. S. Burt, N. Y.*

COLD FEET REMEDY: During cold weather wear shoes one size larger, with cork soles, during the day, and at night on going to bed rub the ankles and feet briskly for a short time with the hands; or, dip the feet into a pan of shallow cold water, or snow, two or three times quickly and rub them briskly for a few moments with a coarse towel, more especially in the hollow of the feet. Wear during the night a pair of fine light silk or woolen stockings.—*Exchange*.

Fever and Ague Cure.—No. 1. The small frost grapes that grow wild in many parts of the country I have proven to be a specific for chills and fever. They should be gathered or secured soon after being touched by the frost. They can be kept in a small box or paper sack during the year, without spoiling, ready for use.

One or two bunches should be taken and eaten when the fever is at its height. The above quantity should effect a cure.—Philindia Cole, Union, Dec. 8, 1894. See chills and fever.—Editor.

No. 2. Buttermilk is good, especially in fever, as an article of diet. A cup of fresh buttermilk two or three times a day is a sure cure for liver complaint.

It is much easier to digest than new milk.—Prof. H. S. Burt, New York.

- No. 3. "To break up a fever, use a tea made of elder flour and horse mint."—Exchange.
- No. 4. To burn rosemary in the rooms clears fever away. Yet, if there be a spider's web in the house the fever, it is said, will linger in it.

SCARLET FEVER AND SCARLETINA: No. 5. This is one of the most infectious of diseases, and is very catching, when it has once entered a house. In the worst stage place a few tamarinds in boiling water, to be drank moderately cold, which acts as a powerful cleanser, even in putrid fever cases. The drink is delightful to persons parched under heat.—Fray's Golden Recipes.

Flannel.—No. 1. Old and young should wear flannel next to the skin, winter and summer.—Fray's Golden Recipes. London.

NEW FLANNEL: No. 2. Before making up new flannel, soak it in cold and then in hot water, and it will not, it is said, shrink afterwards.—Comfort, 1894.

Filter.—A SIMPLE FILTER: A very cheap, simple and effective filter can be made by means of a common flower-pot. All that is requisite is to fill the hole with a piece of sponge, and then place in the pot alternate layers of sand, charcoal, and small pebbles. The flower-pot thus fitted up may be placed in a jar or other convenient vessel, into which the water as it filters through can be received.— Canadian Star Almanac, 1894.

Fire Kindlers.—1. Dip the wood in melted rosin.
2. The following composition is sometimes used: Sixty parts melted rosin, and forty parts tar, in which the wood is dipped for a moment. Or take a quart of tar and

three pounds rosin; melt them, then cool down a little and mix as much sawdust with a little charcoal added as can be worked in. Spread out on a board, and when cold break up into lumps the size of a hickoy nut, and you will have at small exspense enough kindling to last a family one year. 3. Use the cheapest rosin, and add two ounces of tallow to each pound of the rosin. Melt the rosin first and add the tallow. Either smear over small blocks of wood, or mix with sawdust and pour into moulds made of boards which can be knocked apart and the mass broken up.—Scientific American Cyclopædia.

Fuel.—RELATIVE VALUE OF FUELS: No. 1. One pound of peat melts 19 pounds of ice; one pound of wood melts 52 pounds of ice; one pound of coal melts 90 pounds of ice; one pound of coke melts 94 pounds of ice; one pound of charcoal melts 95 pounds of ice.—

Edison's Cyclopædia.

Wood as Fuel: No. 2. Common woods may be ranged in the following order with respect to their heating values, the poorer kinds being named first: White pine, poplar, soft maple, cherry, cedar, elm, hard maple, yellow oak, walnut, beech, apple, scrub oak, white ash, white oak, hickory.—Domestic Science, by J. E. Talmage.

SALT LAKE CITY. Feb. 11, 1895.

No. 3. The choice of fuel for heating or cooking purposes from an economic point of view is but little understood, and the purchase is principally determined by the price without due regard to the actual quality of the coal. In the fuel market, as in that of other commodities, qualities and prices can be had to suit

any pocket, from the anthracite, which may be considered a luxury (as the difference in cost is not justified by the difference in heating qualities) to the Lignite, which (like poor groceries) is dear at any price.

Coal should not be judged by its price but by it heat-giving qualities. A cheap fuel may in fact be the most costly—for example, one coal on the Salt Lake market has a calorific power of 6383 heat units and sells at \$5.00 per ton, while another having but 5546 is sold at the same price.

In the matter of cooking another feature has to be considered. Fuel for this purpose should have a very small per cent. of sulphur, and should part with its volatile matter readily, and at a comparatively low temperature. It should also have a very small percentage of moisture. Those qualities combined, a very desirable fuel is obtained. When the volatile matter is easily driven off, it leaves a bright clear fire for the greatest length of time. The average housewife when using coals of this class soon has her chimney filled with soot. This is caused by letting her fire too low down before replenishing, and then putting on too great a quantity of coal at a time. The volatile matter under this method of firing is driven off in the form of heavy smoke, which condenses into soot, and clogs up the flues, stove pipe and chimney.

The following table shows the proximate analysis of some of the coals on the Utah market.

Locality.		Moisture.	Volatile Matter.	Fixed Corbon.	Ash.	Sulphur.
Rock	Springs	7.72	40.88	50.19	1.2	
U. P.	Pleasant Valley	4.50	44.14	48.68	2.25	.43
P. V.	Pleasant Valley	$3.2\overline{0}$	45.67	47.22	3.35	.56

Locality.	Moisture.	Volatile Matter.	Fixed Carbon.	Ash. Su	lphur,
Castle Gate	1.50	44.62	50.22	3.20	.46
Diamond	2.97	43.63	51.03	2.37	. 64
Weber (Home Coal Co	.) 8.38	46.89	40.45	3.33	.95
Grass Creek	9.16	39.81	47.01	4.02	1.78
Almy	8.70	40.35	41.15	9.70	
Morrison	6.37	41.38	46.27	5.98	.65
Cedar City	4.50	39,90	45.47	10.12	1.79
Cannonville (Utah)	3.70	43.30	48.90	4.10	
$P \circ h$	ant Form	ector I	$T \subseteq G$	cologist	

-Robert Forrester, U. S. Geologist.

By the aid of the above table, and knowing the local prices of coal, by casting a few figures, a person can soon determine which is the most economical fuel to burn. For all practical purposes "the heat units in coal" (carbon, nitrogen and oxygen,) fully determines their relative value.—*Editor*.

No. 4. Coke as Fuel for Domestic Purposes: The value of coke for general use in private houses is but little known. When once introduced, and the proper manner of using it is understood, this kind of fuel becomes almost indispensable. The best kinds of soft coal to be kept burning require attention and frequent application of the poker. A coke fire, with the addition of a little small coal, slack which in any other way would be scarcely consumable, being properly made, will burn for hours without further attention or trouble, and at one third less cost than a fire sustained by coal only. In the kitchen coke is also very valuable: It makes the clearest fire for broiling, and a capital one for roasting, with but little smoke or soot. In all cases the coke should be broken tolerably small.—Mine of Wealth, Etc.

No. 5. Economical Fuel: Take equal parts of pulverized charcoal or coal, pulverized coke and moist clay and form the mass into balls the size of a hen's egg. Some sawdust may be added to the mass.—*Techno Chemical Receipt Book. German*

No. 6. Mix coal, charcoal or sawdust, one part; sand of any kind or ashes, two parts; marl or clay, one part: in quantity as thought proper. Make the mass up wet into balls of a convenient size, and when the fire is sufficently strong place these balls according to their size a little above the top bar, and they will produce a heat considerably more intense than common fuel, and insure a saving of one half the quantity of coals.

A fire thus made up will require no stirring nor fresh fuel for ten hours.—New and Late Edition Scientific American Cyclopædia, Page 226.

The quanity of the combustible ingredients in them, or in the above, should be doubled when they are intended to be used with a very little foundation of coal.—Dicks Encyclopædia.

A hint to housewives that should be appreciated is as follows: At this time of the year, when the coal begins to develop such extraordinory possibilities in the way of rapid consumption, housekeepers are eagerly on the lookout for something that will, at least, prevent waste if it cannot by any other means make a ton "go further." There are several preparations for this purpose sold under fanciful names, but the basis of them is ordinary salt. If the latter is sprinkled liberally over the coal, either in the bin or as it is put into the furnace, it will make it burn more evenly to a clean ash, and will also prevent clinkers and soot.—Herald, Jan. 5, 1895.

Gophers, etc.—The Extermination of Gophers and All Burrowing Animals, Crows, Sparrows, etc.—Prof. Shutt, Chief Chemist of the Dominion Experimental Farms, Canada, writing in a western paper, gives the following advice on this important subject.

From the correspondence received during the past season it would appear that farmers in certain districts of Manitoba and the North-West Territories are seriously troubled by Gophers destroying their feed and garden crops. Many of the letters are accompanied by a sample of strychnine to be tested for adulteration, the failure of this poison being attributed to a supposed impurity. All the specimens, however, submitted to examination have been proved to be pure and there seems to be no ground for the widespread belief that this article, as generally sold in commerce, is adulterated. We have, therefore to look further for the apparent failure which farmers are accustomed to meet with.

Since poisoning by strychnine has been hitherto almost the only method practised, it will be well to consider a few important points in the preparation of the poisoned grain. The quantity usually recommended is at the rate of one ounce of strychnine to one bushel of wheat. If strychnine and not the sulphate is being used, this amount appears to be wasteful, since eight gallons (the equivalent of one bushel) of hot water can only carry half an ounce of strychnine and it is not at all likely that more water than wheat is used. If a small quantity of acid, or strychnine sulphate is used, one ounce of the material may undoubtedly be employed with advantage.

The strychnine or strychnine sulphate, as the case may be, should first be powdered. This may be accom-

plished by a knife blade, piece of old iron or a glass bottle used as a roller. Then treat with a sufficency of hot water and when entirely dissolved, pour the solution (of which there should be a large enough quantity to cover the grain) upon the wheat. Allow the whole to stand for at least thirty-six hours, or until the grain has become quite soft, showing the strychnine has permeated the substace of the wheat. In treating Indian corn with strychnine for crows this summer, I found that three days elapsed before the tissues of the grain became thoroughly impregnated. A teaspoonful of the poisoned wheat placed at the mouth of each burrow should be an ample quantity.

Strychnine is an intensely bitter substance, even in very dilute solutions, and no doubt the gophers are often deterred from eating the grain by tasting the poison on the outside of the wheat. Numerous correspondents have written me to the effect that they cannot get these pests to touch the bait. Though I have never had any opportunity to try its efficacy, I would suggest sugar coating the pills—in other words to sprinkle the poisoned and damp wheat with sugar.

To recapitulate; care should be taken to see, in the first place, that the strychnine is all in solution; and secondly, that the grain has become soft, showing thorough saturation with the poisoned liquid. Of course the greatest care must be exercised when using strychnine, in order that children and farm animals may run no risk of poisoning.

A method that is strongly advocated by those who have practiced it in the United States is one employing carbon bisulphide. It is held to be cheaper, more efficacious, and less dangerous to use than strychnine. Carbon

bisulphide is a highly inflamable liquid, with a very disagreeable smell. Though not corrosive, its vapor is detrimental to health when breathed in quantities. It, however, can be used without any danger, provided ordinary care is exercised, more especially with regard to fire and flame.

The method is as follows: Saturate a small ball of cotton waste with the bisulphide and throw it into the burrow in the evening, and close the mouth of the hole with a little earth. Dry balls of horse manure have been used successfully instead of cotton. Respecting this method I would make two quotations. Dr. C. Hart Merriam, Chief of the Division of Ornithology and Mamology, Washington, D. C., writes me as follows:

"As a general rule, we do not recommend either arsenic or strychnine for the extermination of pocket gophers. We prefer the bisulphide of carbon as cheaper and more efficacious. A handful of rags or waste wet with bisulphide should be thrust into a fresh burrow; the mouth of the burrow should then be stopped. The fumes from the bisulphide being heavier than atmospheric air, float downwards along the tunnel to its remotest ramifications, destroying all animals there."

In a letter from Professor Niswander, of Wyoming Experiment Station, I have the following testimony:

"Over two-thousand burrows have been treated by me in 1893 with bisulphide, and ninety-nine per cent. of the trials have been successful. In a few instances the holes had been apparently opened from the outside, and these were all counted with the unsatisfactory trials. I have no hesitation in recommending carbon bisulphide for burrowing animals. The most important thing in the use of strychnine is to get the gophers to eat it. With

the bisulphide this is not necessary. Both arsenic and strychnine are dangerous to stock running loose; the bisulphide entails no such risk."

In view of this favorable testimony I should strongly advise farmers and municipalities to give the bisulphide a trial. The retail price of bisulphide of carbon varies with the locality at which it is purchased, it averaging between fifteen cents and twenty-five cents a pound. In one-hundred pound lots it could be bought at prices between ten cents and fifteen cents a pound. One gallon—about ten pounds—is a quantity sufficient for one hundred and sixty to two hundred burrows.

Grasshoppers.—Pestiferous Grasshopper: An Agricultural College professor gives a remedy that is a dead shot. The best known remedy for this pest is the "bran and arsenic dope." It is made by mixing one hundred pounds of bran, three pounds of Paris green and two quarts of molasses together, adding enough water to make the mixture of the proper consistency. This remedy has been used in Colorado with splendid results. mixture is strewn between the rows of corn, potatoes, etc., or scattered around through the patches of lucern, and is devoured by the grasshopper in perference to other food. Of course it is necessary to exclude all stock from the fields containing the poison, as it would undoubtedly be eaten and serious results follow .--E. S. Richman, Entomologist, Agricultural College, Logan, Utah. May 14, 1894.

P. S.—Papers should copy this remedy, as it is not generally known to the farmers, and may be of great value to them.—E. S. R. Tribune, May, 1894.

Grain.—How Grain will Shrink: Farmers should

know that wheat from the time it is threshed will shrink two quarts to the bushel, or six per cent., in six months, in the most favorable circumstances. Hence it follows that ninety-four cents a bushel for wheat when first threshed in August is as good, taken into account shrinkage alone, as one dollar in the following February.

Corn shrinks much more—about ten per cent. in six months.

In the case of potatoes, taking those that rot and are otherwise lost together with the shrinkage, there is but little doubt that between October and June the loss to the owner who holds them is not less than thirty-three per cent. This estimate is taken on the basis of interest at seven per cent., and takes no account of loss by vermin.—Canadian Star Almanac.

Glue.—No. 1. Russian Liquid: Soften 50 parts best Russian glue in 50 parts warm water; add slowly from two-and-three-quarters to three parts aquafortis and three parts powdered sulphate of lead.—Scientific American Cyclopædia.

RICE GLUE.—No. 2. The fine Japanese cement is made by mixing rice flour with a sufficient quantity of cold water, then boiling gently with constant stirring.—

Scientific American Cyclopædia.

Hair.—Los Angeles Hair Grower: "Washes to make the hair grow can always be employed, with greater or less success, so long as there is any vitality left in the hair follicles or roots. If, however, these are entirely dead or destroyed, there is no possibility of inducing a fresh growth of hair. This will be evident from the shining or glistening appearance the scalp

assumes when the hair roots are destroyed. The loosening of the hair, which frequently occurs to young persons, or those of middle-age, will generally, if neglected, become real baldness. The case, however, is not a hopeless one. If proper treatment be pursued, the hair will grow afresh and assume its prestine strength. A useful practice—when the hair is not too long and heavy—is to immerse the head in cold water morning and night; dry the hair thoroughly, and then brush the scalp until a warm glow is produced; then apply hair lotion."

Formula: "One pound leaves of wild mountain sage. Boil in one gallon of water in close covered pot. Boil down to two quarts. Add two ounces oil of rosemary; add burgamot, one ounce, to scent. Bottle, label, and cork tightly. Directions: Saturate bare parts thoroughly two times a day for ten minutes, for three days, then miss two days. One quart bottle of the hair grower should produce a good head of hair. Price East \$5.00 per bottle."—J. Stearns.

Headache.—Charcoal a Cure for Sick Headache: It is stated that two teaspoonfuls of finely powdered charcoal, drank in one-half tumbler of water, will in fifteen minutes give relief and cure the sick headache.—

Moore.

Hops.—Invaluable: Less medicine would be used if the value of hops was more known. Use a quarter of an ounce to a pint of boiling water and all the better with a teaspoonful of Epsom salts in it. Take a wine-glassfull in the morning, which will not only restore but will keep anyone in the best of health, at little expense. Hop drink gives a cheerful mind, rich blood, and good.

digestion. Choose the gold color. As an appetizer, carroway seed may be added.—Edwin Fray, London, England.

Honey.—Artificial: White sugar 5 pounds, water 2 pounds. Gradually bring to a boil and skim well. When cool add one pound of bees' honey and four drops peppermint. To make of better quality add less water and more real honey.—Scientific American Cyclopædia.

Note:—Families, who buy honey in small quantities, should be careful to see that they get a genuine article, as there are tons of adulterated honey, sold by unscrupulous persons, for the pure article.—Ed.

How to Preserve Shoe Soles.—Melt together tallow and common rosin. Two parts of tallow and one part of rosin, and apply the preparatton, hot, to the soles of the boots and shoes as much of it as the leather will absorb. One farmer declares that this receipt alone has been worth more than five dollars.—National Farmers' Cyclopaedia.

Hog Cholera.—A cheap and simple remedy for this terrible disease is given by an Iowa Farmer: To six quarts of air slacked lime add one quart each of powdered sulphur and common salt. Stir well together and place in a long trough in a dry place where the hogs can have free access to it. Keep such a mixture in the trough throughout the season and the hogs will not have cholera. Tested for a number of years, it has never failed to prevent or cure the disease.—Irrigation Age, Oct., 1894.

Harness Dressing.—The Government Harness Dressing is as follows: One quart neats foot oil, ½ lb

baberry tallow, ½ lb beeswax, ½ lb. beef tallow. Put the above in a pan over a moderate fire. When thoroughly dissolved add one pint castor oil; then while on the fire, stir in one fourth ounce lampblack. Mix well and strain through a fine cloth to remove sediment, let cool, and you have as fine a dressing for harness, boots, and shoes, or leather of any kind as can be had.—S. A. Cyc.

Ice Cream, Home Made.—One quart of cream, 6 eggs, 12 ounces powdered loaf sugar. Break the eggs into a stewpan and whisk together; add the cream and sugar; when well mixed, place on the fire and continue stirring from the bottom with the whisk, to prevent burning, until it gets thick; take from the fire, continue to stir for a few minutes. If the custard be suffered to boil it will curdle. Strain, flavor with juice of 2 lemons and when cold freeze.—Scientific American Cyclopædia.

Ice.—How to Keep Ice In Summer: Wrap ten lbs. of ice in three or four thicknesses of blanket or flannel, and place it on a grating, or on four crossed sticks, so that no water can accumulate underneath and at the end of 2 days it will not have entirely melted. When the ice is allowed to stand in its own water it will be all dissolved in 3 or four hours.

Freezing Mixture:—Snow or pounded ice, 2 parts; common table salt, 1 part.—Ex.

Indigestion and Constipation, (No 1) from which so many suffer, may be entirely cured, by using in lieu of oat meal, bran mush. It should be cooked at least thirty minutes, and may be eaten with cream and sugar. The taste for it has to be cultivated, but when once acquired, many prefer it to oat meal or germade. It is a

cheap and wholesome dish. Dr. T. B. Beatty and other physicians hold it in high esteem.—Local Item.

No. 2. Use coarse vegetable diet, and plenty of fruit and berries, with regular exercise. A teaspoonful of wheat bran in a teacup of hot water before retiring is an excellent remedy. By using whole wheat or one fourth the amount of shorts as of the flour in the bread, you will find it a sure cure for sick headaches and all troubles arising from indigestion.— Ex.

Invalid.—Drink for an Invalid: Beat up an egg, add sugar to taste, lemon for flavoring, and milk.— Zion's Home Monthly.

Insects.—How to Destroy: The Bureau of Entomology Department of Agriculture, Washington, sends out the following, for use as insecticides on or about plants, trees, chicken coops, etc.: London purple—to 20 pounds flour from one quarter to one-half pound is added, and well mixed. This is applied with a sifter or blower. With forty gallons of water, one-quarter to one-half pound is mixed for spraying. Paris Green, with twenty pounds of flour from three-quarters to one pound is mixed and applied by sifting or by a blower. The same amount of the insecticide to forty gallons of water is used as a spray. Carbolic Acid: A solution of one part in one hundred of water is used against parasites on domestic animals and their barns and sheds; also on the surface of plants. Persian Insect Powder is blown or sifted on dry. Tobacco Decoction: This is made as strong as possible, as a wash or spray, to kill insect pests on animals and plants. - Canadian Star Almanac.

Kitchen.— Baking Powder. This is chiefly employed as a substitute for yeast. One or two teaspoonfuls are mixed with the dry flower and other ingredients, which are then made into a dough, as quickly as possible, with cold water, and at once baked or boiled, as the case may be. By the addition of about one-half drachm turmeric powder to each pound of baking powder, it is converted into egg powder.—Dick's Encyclopædia.

Home Baking Powder.—No. 1. Formula: Bicarbonate of soda, 16 oz.; tartaric acid, 14 oz.; carbonate magnesia, 6 oz.; corn starch or rice flower, 6 oz; best patent roller flower, 6 oz; use one teaspoonful to one pound of flour.

The soda and acid are properly dried before mixing, by passing repeatedly through a fine seive, or the powder spoils by keeping. Pack the powder down tightly to prevent the absorption of moisture; preserve in large-mouthed stoppered bottles.

No 2. Formula: Bicarbonate of soda, 4 oz.; cream of tartar, 9 oz., corn starch, 7 oz.; dry separately and mix thoroughly.

We have found that baking powders keep well in Mason's patent jars.—Scientific American Cyclopædia.

As a cooking media, the plant oils, or vegetable oils, are in all respects superior to animal fats. Cotton-seed oil has been proved to be nutritious and wholesome.—

Domestic Science, by Dr. J. E. Talmage.

Bread.—The Bread We Eat: Bread has been called the staff of life, and yet this figure of speech, in view of the kind of bread that most persons eat, is a decided misnomer. The ordinary white flour, which

forms the basis of much food that is eaten, is principally a starch compound, and contains only three of the fifteen elements that go to compose the body, namely; carbon hydrogen and oxygen. To prove that white flour does not meet the requirements of the body, Magendil fed it wholly to a number of dogs, and at the end of forty days they died. Others to which he gave the wheat meal, at the end of this time were in first class condition. More than half of the children under twelve years of age, have decayed teeth, owing to the insufficient supply of the required mineral ingredients, and this deficiency is caused as a rule by eating white bread. Dispepsia, constipation, loss of nerve power, and many other diseases are produced by improper feeding. Sulphur is required for the growth of the hair, yet white flour does not contain a trace, the phosphates are also notably lacking, and as these substances are absolutely necessary in the animal economy, the use of bread as ordinarily prepared should be interdicted. When flour is made of the whole grains of wheat we have an article of food which contains all the elements that the body requires for its support and this flour should be universally used instead of the false aesthetic taste that demands "a white loaf."—Zion's Home Monthly, Sept. 1, 1894, by H. W. Naishitt.

Graham Bread.—No. 1. Two-thirds of a cup of molasses. One pint of sweet milk. One teaspoonful of soda. One quart of graham flour. A pinch of salt.—Mrs. E. Crandall, Hoesick, N. Y. Modern Cook Book.

Graham Bread.—No 2. Is made good of unbolted wheat flour, freshly ground. Take luke warm water to wet the flour, and use yeast and salt, as for wheat bread,

knead in flour to make stiff, let stand from one to two hours till risen, and then bake in loaves of moderate size. This is the best bread for people who are inclined to dispepsia.—Dr. Gunn.

Buns.—One pound of flour, six ounces of butter, two teaspoonfuls of baking powder, a quarter of a pound of sugar, one egg, nearly a quarter of a pint of milk, a few drops of essence of lemon. Bake immediately. This receipt will make twenty-four buns.—Mine of Wealth.

BUTTER.—How TO KEEP: No. 1. A compound of one part sugar and one part nitre (saltpetre) and two parts of the best salt, beaten together into a fine powder and mixed thoroughly with the butter, in the proportions of one ounce to the pound, will keep the butter sweet and good for two year.—National and Farmers' Cyclopædia.

No. 2. Butter washed with a solution, (4 drm), five teaspoonfuls of salicylic acid to a gallon of water kept in it, or wrapped in clothes soaked in this water keeps fresh for a very long time.

Butter already rancid, can be greatly improved by a thorough washing and kneading with a strong solution (8 drm) ten teaspoonfuls of acid per gallon of tepid water, followed by washing in pure cold water. The bad smell and taste often found in butter is entirely prevented by such an admixture of the acid.—S. A. Cyclopædia.

To Sweeten Ransid Butter.—Wash the butter with some good new milk, and next with cold water. Butyric acid, on the presence of which rancidity depends is freely soluble in fresh milk.—Scientific American Cy.

BUTTER.—APPLE BUTTER: Three gallons of cooked apples: One quart of cider vinegar. Season with cinnamon. Boil this down to about two gallons. Add just

before removing from the fire, from 3 to 5 pounds of sugar. When cool tie up in jars, and keep in a cool place.—Mrs. S. E. Ruff, N. Y.

Baked Apples.—Choose apples of a tart or juicy kind. Wash and put them in a shallow earthen dish with water to cover the bottom of the dish, this should be renewed as necessary. Bake in a moderate oven, for thirty minutes, or until done. When taken from the oven sift over them a little white sugar. For many persons cream is a pleasant addition.—The Household, Feb. 1895.

BEEF.—POTTED BEEF: An excellent dish. Equal to the best steak, and cheap. One shank of beef, or two of veal; bones well broken, wash carefully and remove bits of bone, cover with cold water; watch when the boiling begins and take off the scum that rises. Stew five or six hours till the muscles are dissolved; break the meat small with a fork; far better than chopping; put it in a bread pan; boil down the gravy until in cooling it will turn to a stiff jelly. Season with salt, pepper, all-spice and a little sage, and pour it hot, upon the meat. Stir together and set aside over night, when it will cut into handsome mottled slices for breakfast or supper.

—National Farmer's and Household Cyclopædia.

BEEF—TO MAKE TOUGH BEEF TENDER: Cut stake into slices about two inches thick, rub over them a small quantity of carbonate of soda. Wash off next morning, cut up and cook. The same process will answer for fowls, legs of mutton, etc.—The Household Hints and Helps.

To Test Mushrooms.—The following is said to be a test of the wholesomeness of mushrooms; sprinkle a

little salt on the spongy part or gills of the sample to be tried; if they turn yellow, they are poisonous; it black, they are wholesome.—Danish Pioneer.

CHEAP OR DEAR FOOD.—The cheapest and most economical food is that which supplies the most nutriment for the least money.—W. O. Atwater, Ph. D., U. S. Bulletin, No. 23.—1895.

Substitute for Graham Flour.—Graham flour is simply flour made from whole wheat without bolting. The consumer pays from \$1.50 to \$2.00 per hundred, (according to prices ruling in the local markets) for graham flour, while shorts or middlings, which is a most excellent substitute for graham, can be bought for less than one half the money.

Should the shorts be found to be too coarse, sift, or add a little white flour.

Shorts also, when well cooked, answer very well as a substitute for wheaten grits, and germade.—*Editor*.

COFFEE.—THE USE OF COFFEE: If coffee required for breakfast be put in a granitized kettle over night, and a pint of cold water poured over, it can be heated to just the boiling point and then set back to prevent further ebullition, when it will be found that, while the strength is extracted, its delicate aroma is preserved.

Two ounces of coffee to one pint of boiling water makes a first-class beverage. Bitterness comes from boiling it too long. It is asserted by men of high professional ability that when the system needs stimulant nothing equals a cup of fresh coffee. It is also considered a specific in typhoid fever. Burned on hot coals it is a disinfectant for a sick room.—Zion's Home Monthly, Sept. 1894.

CAKE—FRUIT CAKE, VERY NICE, THAT WILL KEEP FOR MONTHS.—Butter, sugar, molasses, flour and sweet milk, of each one cup; currants, four cups; eggs, eight; baking powder, two teaspoonfuls; citron, chopped fine, one-half pound; two grated nutmegs, and cinnamon to taste. Bake two hours.—Dr. Chase.

CURRANT CAKE.—Butter, one cup; sugar, two cups; four eggs; flour, three and one-half cups; sour milk one cup; currants, two cups; saleratus or soda, one teaspoonful. Flavor with lemon or other extracts as you choose.—Dr. Chase.

Light, plain cake is easily digested and very nutritious. Arctic explorers now take with them a good supply of rich fruit cake, as it has been found that it possesses greater strength and heat-producing properties than any other article of food.—J. H. Ayers, A. M.

In making cake, Dr. Joseph S. Richards recommends the use of graham flour.—Ed.

RICE CAKE.—Six eggs well beaten; mix in five oz. sugar; put in one-half pound ground rice, a very little brandy, and the rinds of two lemons grated. Stir, and bake for one-half hour in a quick oven.—Ex.

CRACKED WHEAT MUSH, VERY EXCELLENT.—The same also if cooked whole: Cracked wheat makes an excellent mush, cooked and eaten the same as oatmeal.—Dr. Chase.

DEVILED HAM.—Take lean boiled ham and chop it very fine, season with black and red pepper and dry mustard. Press it solid and slice thin. Beef or boiled beef's tongue may be served in the same manner.—Mrs. R. W. Mills, Webster Grove, Mo. Modern Cook Book.

Easy of Digestion.—Rice, grapes, prunes, tapioca, sago, arrowroot, strawberries, asparagus, cauliflowers,

baked apples, oranges, peaches, toast water, oatmeal, mutton, venison, hare, sweetbreads, chicken, turkey, partridge, pheasant, grouse, beef tea, mutton broth, milk, turbot and haddock.

HARD TO DIGEST.—Pork and veal, goose, clams (roast), liver, brain, salt meat, sausages, hash lobster, crab, salt fish, mackerel, oil, melted butter, shrimps, mussel, cheese, new bread, pastry, carrots, parsnips, pickles, mushrooms, cucumbers, pine-apples, plumbs, nuts, pears, custards, chocolate and muffins.—Ex.

HORSE-RADISH TO BOTTLE. — Six tablespoonfuls scraped or grated horse-radish, one tablespoonful white sugar, one quart good vinegar. Scald the vinegar. Pour boiling hot over the horse-radish. Bottle. — Scientific American Cyclopædia.

IN MOST RECEIPES where baking powder is called for you can substitute one small teaspoonful of soda or saleratus to every pint of sour milk or buttermilk used to wet the flour, meal, etc., remembering to mix the soda or saleratus well with the flour before sifting. Give this a trial.

RECIPES FOR BREAD—GRAHAM BREAD.—One quart of sour milk, two round teaspoonfuls of soda or saleratus, two teaspoonfuls of salt, one cup of New Orleans molasses, two tablespoonfuls of brown sugar, four coffeecups of Graham flour, four coffee-cups of wheat flour-Bake one hour in a slow oven.

Brown Bread.—Three cups yellow Indian meal, one-and one-half cups rye meal, three cups sour milk, one-half cup molasses, one teaspoonful soda or saleratus. Steam three hours, then bake three hours slowly.

BOSTON BROWN BREAD. - One even cup of Indian meal,

two heaping cups of rye flour, one teaspoonful of salt and one of soda or saleratus, one cup of New Orleans molasses. Mix very thoroughly the meal, salt and soda, add one pint of hot water to the molasses, and stir up well into a smooth batter. Put in a buttered tin boiler, cover tightly, set in an iron kettle to boil three hours or more, adding hot water as necessary. When done, set the bread-boiler (uncovered) in the oven for fifteen minutes.

MILK BREAD.—One quart milk, half teacupful of yeast, one-fourth pound butter, one tablespoonful white sugar. Stir into the milk, which should be made blood warm, a pint of flour, the sugar, and lastly the yeast, beat well together, let stand five or six hours to rise; dissolve one teaspoonful soda or saleratus in a little warm water, melt the butter, and add all with a little salt to the batter; work in flour enough to make a stiff dough; let this rise three hours, and make into small loaves; set near the fire for half an hour, and then bake.

CORN BREAD.—For three small loaves take one quart white Indian meal, pour boiling water enough to scald the meal, without leaving any lumps or wetting too much, then one up molasses, and one teaspoonful soda or saleratus, dissolved in a little water. Let it cool enough to mix with the hands. Use a bowl of sponge prepared the night before, and knead up with wheat flour until quite stiff, then set near the stove to rise. When light, bake one hour.

BUTTERMILK BREAD.—One pint buttermilk heated to scalding, stir in while hot a tablespoonful white sugar, and enough flour to make a tolerably stiff batter. Let it stand over night in a warm place. In the morning stir

into the sponge a teaspoonful soda or saleratus dissolved in a little warm water, a little salt, and two tablespoonfuls melted butter; work in just flour enough to enable the dough to be easily worked; knead well, make into loaves, let rise until light, then bake. This makes very wholesome bread.

TO MAKE WHEAT BREAD.—Put seven pounds of wheat flour in a large bowl or tray, heap it around the sides, leaving a hollow in the centre; put into it a quart of warm water, add to it a large tablespoonful of salt. half a teaspoonful of soda or saleratus dissolved in a little water, and half a gill of baker's yeast; have three pints more of water, and with as much of it as may be necessary make the whole in a rather soft dough, work it well with both hands; when it is smooth and shining strew a little flour over, lay a thicly-folded cloth over it. and set it in a warm place for four or five hours, then knead it again for fifteen minutes, cover it and let it set to rise again; when it is like a sponge, work it down again, divide it in loaves, either two or four, and bake it in a quick oven, according to their size; one hour, if divided in two loaves; half an hour each, if divided in four.

In cold weather bread should be mixed in a warm room, and not allowed to become cold whilst mixing; have a thickly-folded cloth, warm it and lay it over, and set the bowl in a warm place; if there is any difficulty about its rising, set the bowl or tray over a kettle of hot water. It is as well to mix this bread at night in cold weather, and cover it close, in a warm room, until morning.

GRIDDLE CAKES .- Mix one quart of sour milk or

buttermilk with three tablespoonfuls of molasses, and salt to taste, then add slowly, four cups of sifted flour, well mixed with two teaspoonfuls soda or saleratus, before wetting. One or two eggs will greatly improve this.

BUCKWHEAT CAKES.—Mix three tablespoonfuls of molasses with one quart of sour milk or buttermilk and one or two beaten eggs. Then add and stir slowly enough buckwheat flour to make a nice batter, and one handful of corn meal well mixed with one large teaspoonful soda or saleratus. Salt to taste. Bake immediately.

CORN MEAL BATTER CAKES.—One pint of corn meal, three-quarters pint of sour milk, one small teaspoonful soda or saleratus stirring till it foams. Two eggs; salt to taste. Mix well. Have the griddle hot and well greased. Serve immediately.

OAT MEAL CAKE.—One cup of cream, two of sour milk, two tablespoonfuls of brown sugar, one large teaspoonful of soda or saleratus dissolved in the sour milk, and oat meal enough to form a batter.

CAKES.—In cake-making always cream the butter and sugar together; always sift the flour; always dissolve the soda in milk, molasses or water and beat the eggs nice and stiff.

CUP CAKE.—One teacup butter, two teacups sugar, three teacups flour, four eggs, one small teaspoonful soda or saleratus. Flavor with rind of one lemon and a little juice.

TEA CAKE.—One cup butter, three cups sugar, five cups flour, one cup milk, three eggs, nutmeg, one teaspoonful soda or saleratus.

LOAF CAKE.—One cup butter, four cups flour, half a pint milk, one egg, a little yeast, nutmeg, one teaspoons ful soda or saleratus. Put in two cups of sugar and raisins just before baking.

Wedding Cake.—One pound butter, one and a quarter pounds sugar, one pound flour, thirteen eggs, three pounds raisins (stoned and chopped) mace, nutmegs, cloves and cinnamon, also citron to taste, one teaspoonful soda or saleratus dissolved in water.

GINGER COOKIES.—Half a pound butter, one pint molasses, two teacups sugar, two tablespoonfuls ginger, two teaspoonfuls soda or saleratus, flour to make it stiff enough to roll.

CINGER Bread.—One cup molasses, one cup sour cream, two and one-half cups flour, one teaspoonful ginger, one teaspoonful soda or saleratus, salt.

SOFT GINGER BREAD.—One cup cream, one cup molasses, two and one-half cups flour, one egg, one teaspoonful ginger, half a teaspoonful soda or saleratus, salt.

SLAP JACKS.—Scald two cups of yellow meal with a pint of boiling water, beating to smooth mash; thin with one quart of buttermilk in which is dissolved two teaspoonfuls soda or saleratus; beat all thoroughly; add a little salt, one or two eggs well beaten, and enough flour to form a batter. Have the griddle clean, smooth and hot. Cold rice or hominy can be used instead of the corn meal.

Waffles.—Two eggs, one pint of sour milk, butter size of an egg, one teaspoonful of soda or sleratus, a little salt, and enough flour to make a batter. Beat the white of an egg separately and add last. Dissolve the soda in the milk as usual.

CORN BREAD.—Two teacups Indian meal, two teacups flour, two teacups sour milk or buttermilk, two teaspoonfuls soda or saleratus, half a cup molasses, one egg.

GRAHAM GEMS.—One pint sour milk, one egg, one tablespoonful molasses, one and a half pints Graham flour half a teaspoonful of soda or saleratus; beat together a few minutes. Have the tins hot and greased; drop in the batter, and bake ten or fifteen minutes in a quick oven.

QUICK BISCUIT.—One pint cream, one and one-half pint buttermilk, one large teaspoonful soda or saleratus, salt, flour to make it stiff as bread.

Pancakes.—One quart of flour, two eggs, one teaspoonful salt, one heaping teaspoonful soda or saleratus, enough buttermilk or sour milk to thin batter. Beat the eggs, add buttermilk, sift the flour and soda together into the eggs and milk, add the salt.

RICE GEMS.—One pound wheat flour, one pound rice flour; mix thoroughly and add one pound sugar, one pound butter, four eggs, flvaor to taste. Then dissolve one teaspoonful soda or saleratus in enough milk to form a dough that can be rolled out and cut the same as cookies.

CORN CAKE.—Three eggs, beaten light, two cups sour milk, three tablespoonfuls melted butter, one tablespoonful white sugar, one small teaspoonful salt, one teaspoonful soda or saleratus mixed well with corn meal, enough to make a thin batter. Bake in shallow pan or small tins for half an hour in a hot oven.

Soda Biscuit.—One pint sour milk or buttermilk, two teaspoonfuls melted butter, one teaspoonful soda or

saleratus, one quart flour, one teaspoonful salt. Mix all together quickly cut into biscuits and bake in a very hot oven quickly.

STRAWBERRY SHORT CAKE.—Take one pint of buttermilk (into which is dissolved a teaspoonful of soda or saleratus), a little salt, and about two tablespoonfuls of butter, a tablespoonful of sugar, and nearly a quart of flour, roll out quickly into two sheets just large enough for your biscuit pan, butter them and place one on top of the other and bake in a quick oven. Have three quarts of berries stemmed and well sugared, put two quarts between the layers, reserving the third quart to crush with sugar for the top. Do not put the berries into the short cake until ready to be eaten.

GINGER SNAPS.—One cup molasses, one cup sugar, one cup butter (not quite full), seven cups flour, one egg, one large teaspoonful soda or saleratus, one table-spoonful vinegar, ginger to taste.

JELLY CAKE.—One cup of butter, two of sugar, three eggs, one cup of milk with a teaspoonful of soda or saleratus and four cups of flour. Bake in layers and spread with currant jelly. Ice with the white of one egg and the same amount of cream stirred together, and made stiff enough to spread with confectioner's sugar.

WHITE MOLASSES CANDY.—One pound of granulated sugar, one pint of golden syrup; boil till quite thick, when dropped into cold water, then add one pint of molasses and four tablespoonfuls vinegar; boil until it will crack, remove at once from the fire, and stir in quickly half a teaspoonful of soda or saleratus and flavor with lemon; pour in pans and work until white. This is very fine.

LEMON JELLY CAKE.—One and a half cups of sugar, to one of butter, four eggs, half a teaspoonful soda or saleratus in half a cup of sour milk, nearly three cups of sifted flour. Flavor with lemons, and bake in layers.

Lemon Jelly for Above.—The grated rind and juice of one lemon, one cup of granulated sugar and one egg; beat all together thoroughly and cook in double boiler until thick. Spread when cold and frost with white frosting.

With these two recipes for layer cake a great variety may be made by using different frostings or placing chopped fruit between the layers.

A nice chocolate frosting is quickly made by beating two whites of eggs up stiff and stirring in pulverized sugar until it thickens enough to spread, then add four tablespoonfuls of cocoa and a teaspoonful of extract of vanilla.

POUND CAKE.—One pound sugar, nine eggs, one cup milk, one cup butter, two eggs, one teaspoonful soda or saleratus, one quart flour, nutmeg.

Molasses Cake.—One cup molasses, one cup sugar, one cup cold tea or coffee, one cup butter, two eggs, two teaspoonfuls soda or saleratus, one tablespoonful ginger, a little salt, flour to thicken, not too much.

DOUGHNUTS.—Two cups of sugar, one cup of sour milk, one teaspoonful soda or saleratus, three eggs, butter size of an egg; add flour to make stiff enough to roll out. Fry in hot lard. A little cinnamon can be added if you wish.

Lemon Cake.—One and a half cups sugar, one cup butter, half a cup milk, two and a half cups flour, three

eggs, half a teaspoonful soda or saleratus, the juice and grated rind of one lemon.

FRUIT CAKE.—Three pounds raisins, three pounds currants, one pound citron, one pound butter, one pound sugar, one and a quarter pounds flour, ten eggs, half a cup molasses, one teaspoonful mace, cloves, allspice, cinnamon and nutmeg, one teaspoonful soda or saleratus wet in milk. Scorch part of the flour.

PLUM PUDDING.—One pound beef suet (chopped fine), one-half pound brown sugar, enough milk to make a stiff batter, one teaspoonful cloves, two teaspoonfuls cinnamon, one nutmeg, one teaspoonful soda or saleratus, one pound raisins, one pound currants, half pound citron, one pound flour. Mix all well, put in a bag and boil four hours.

Sauce for Above.—Two cups sugar, two teaspoonfuls butter, one cup of boiling water. Nutmeg or cinnamon to taste.

Boiled Apple Pudding.—Pare, core, and chop fine six large juicy apples; add two cups fine bread-crumbs, one cup suet (chopped fine), juice one lemon, one-half teaspoonful salt and one teaspoonful soda or saleratus dissolved in warm water. Mix well together with a wooden spoon. Boil three hours in a buttered mold. Serve with sweet sauce.

CAKE—EGGLESS.—No. 1. One cup sugar, one-half cup butter, one cup buttermilk, one teaspoonful of soda; one teaspoonful of cream of tartar, three cups of flour. Bake in a moderate oven.

No. 2. One and one-half cups sour milk, one-half cup butter, two cups chopped raisins, one teaspoonful

soda, spice to taste., flour enough to make a thick batter.

LEMON SNAPS.—One large cup of sugar, two cups of flour, full half-cup butter, two eggs, two tablespoonfuls of hot water, one-half teaspoonful soda. Flavor with lemon to taste. Roll very thin. Bake in moderate oven.

MEAT PIE.—For a good meat pie chop pieces of veal, beef or lamb, or all three, and make a layer in the bottom of your baking dish with thin slices of tomatoes and a very little onion, season nicely, add bits of butter sparingly and cracker crumbs. Repeat this until the dish is nearly full, then pour into it a cup of water and place on top a crust made of one cup of flour, into which you have carefully sifted one-half a spoonful of soda or saleratus and one-half a teaspoonful of salt. Rub in a tablespoonful of butter (or lard), wetting it up with sour milk or buttermilk into a stiff dough, roll lightly, place over the pie, and bake a nice brown. Garnish with parsley around the edges before serving.

CHICKEN PIE.—Boil a good-sized chicken until tender (a little soda added to the water hastens the boiling and improves the meat), when done, having seasoned it before it was half-cooked, remove the bones and make layers of the chicken with thinly-sliced potatoes until your dish is full, then pour in your gravy, thickened, and cover with a crust same as for the meat pie. Or take three-fourths of a cup of sour milk (clabbered), in which is dissolved half a teaspoonful soda or saleratus, one egg well beaten, cup and a half of flour, half a teaspoonful of salt, and a teaspoonful of sugar. This makes a very fine crust.

Pudding Sauce.—One teacup of sugar, half a cup of butter, one tablespoonful flour; beat all together and add three gills of boiling water. Flavor and color with cherry or berry juice. Let it just come to a boil, then set on the back of the stove until ready to use.—Arm and Hammer Receipt Book.

MEAT—TO KEEP IN HOT WEATHER.—Fresh meat, when laid upon a plate or tin dish, in hot weather, will soon turn green, sour and spoil. By hanging it up in a cool, airy place it will keep sweet and fresh for some time.—Ex.

MINCEMEAT.—No. 1. Four pounds of lean, boiled beef (chopped fine), eight pounds of chopped, green, tart apples, one pound of chopped suet, three pounds of raisins (seeded), two pounds of currants, one-half pound citron, cut fine, one pound of sugar, one quart molasses, two quarts sweet cider, one tablespoonful each of salt, pepper, mace and allspice, and four tablespoonfuls of cinnamon, two grated nutmegs, and one tablespoonful of cloves. Mix thoroughly and warm through on stove range, remove from the fire, and when nearly cool stir in a pint of good brandy and one of Maderia wine. Put into a crock, cover it tightly, and set in a cool place where it will not freeze. Will keep good all winter.—

Chef de Cuisine, Astor House, N. Y.

No. 2. Ingredients: Four pounds of lean, cold boiled beef, chopped fine, nine pounds of apples, chopped fine, one and a half pounds of suet, chopped fine, three pounds of raisins, two pounds of currants, half a pound of citron, sliced fine, five pounds of sugar, three teaspoonfuls of ground cloves, ten teaspoonfuls of ground cinnamon, five teaspoonfuls of ground mace, one

teaspoonful of ground black pepper, one quart of vinegar mixed with one quart of molasses. Mix all together, and add the juice and gratedrind of two lemons, and salt to taste.

No. 3. Ingredients: Two pounds of raisins, three pounds of currants, one and a half pounds of cold boiled beef, three pounds of beef suet, two pounds of moist sugar, two ounces each of candied citron, orange and lemonpeel, one nutmeg, two pounds of apples the grated rind and juice of two lemons, one cupful of mixed vinegar and molasses. Stone and cut the raisins across once or twice; chop very fine the beef, suet and apples; slice the peel fine. Mix all thoroughly together, and add salt to taste.—Family Herald, 1895.

MAPLE SYRUP—How TO MAKE.—To every pound of maple sugar add one pint of water, and simply bring the same to a boil. Bottle for use. Much cheaper and much better than the average syrup.— Techno Chemical Receipt Book. German.

No people on the earth cook so badly and waste so much as Americans. In half the houses in the country one-third of all that is brought into the kitchen for food is carried out the back door as garbage. Travelers from abroad are shocked by the wastefulness of American cooks. The French are famed the world over for their economical dishes; one foul is enough for a medium-sized family; the vast variety of vegetables, pastry, and pudding are unheard of, yet he who sits at a French table fares well and in abundance. On the rich Western farms everything grows luxuriantly, grain, vegetables, fruits, eggs, milk, cream and butter without stint. Yet who has not repeatedly sat at tables loaded with viands

and nothing fit to eat—heavy bread, meat swimming in grease, bad coffee, etc. A man is what his food makes him to a greater degree than ethnologists admit; therefore his food should be of the proper sort, well cooked, easily digested and nutritious. To cook well requires teaching and experience. A change of diet for the better, it has been recently demonstrated, has worked astonishing results in the reformation of criminals. Cooking is an art, it is practical chemistry, more important than any other branch of that science, since upon it depend the health and usefulness of the human race.—

Chicago Inter Ocean, Jan. 1895.

Note.—"It is not what we eat, but what we digest, that makes us strong."

PEACHES, PLUMS AND PEARS.—To put up fresh: Take prime ripe fruit, wipe dry, and place the same in jars. Fill with boiling water and seal quickly. Turn jars upside down and place in a cool place.

To fill jars with hot fruit without warming them:

Simply place under jars a large folded newspaper, and fill them with boiling hot fruit. They never break.—

Mrs. L. Rudd, Cannon St. City.

PLUM AND APPLE JAM.—A very nice jam can be made by stewing together plums and apples; put in a very little cinnamon and cloves. Cook an hour. Sweeten to taste when ready to take off from the fire. Then tie up in jars when cold.—Mrs. S. E. Ruff Kingsville, Miss.

BLACKBERRY OR RASPBERRY JAM.—Two quarts of berries, one quart of fine cooked apples, boiled from twenty to thirty minutes. When done add from one to two quarts of sugar, to taste.—Mrs. L. K. E., Lebanon, Ohio.

PIES—APPLE PIE.—Line a pie dish with a nice crust, and sprinkle on it about three tablespoonfuls of flour, adding a little water, sugar, and nutmeg, and dropping in a few small pieces of butter. Get some nice mellow apples, pare, cut in quarters, core them, and put them in the dish. Bake in a moderate oven.

PEACH PIE.—Line a pie tin with puff paste, fill with pared peaches, cut in quarters, well covered with sugar, put on upper crust (or omit upper crust), bake until done; remove from the oven, and cover with a meringue made of the whites of two eggs, beaten to a stiff froth, with two tablespoonfuls powdered sugar; return to oven and brown slightly. Canned peaches, instead of fresh, may be used in the same way.—Zion's Home Monthly, H. W. Naisbitt, Editor.

Squash or Pumpkin Pie.—Ingredients: One cupful and a half of stewed and strained squash or pumpkin, which must not be watery, one cupful of boiling milk, half a cupful of sugar, half a teaspoonful of salt, one saltspoonful of cinnamon, and one egg. Mix in the order given, and bake with an undercrust only.

Custard Pie.—Ingredients: Three eggs, three table-spoonfuls of sugar, one saltspoonful of salt, nutmeg to taste, three cupfuls of milk. Scald the milk and pour it hot upon the eggs thoroughly beaten with the sugar; add the seasoning, and strain into a deep plate lined with paste. Bake slowly, and the moment it puffs remove from the oven.

LEMON PIES.—Rub together one pound butter and one and one-half pounds flour with cold water sufficient to make a good stiff dough to bottom your plates with and fill with the following mixture: Put into a bowl the

juice of three lemons, the grated rind of one with one and one-half pounds of sugar and nine eggs. Mix thoroughly and fill your plates with the mixture. Bake slowly half an hour.

Another filling: Three lemons, six eggs, three-fourth pound sugar, one-half pint milk, with salt and nutmeg. Mix as the last.

Another without lemons: One pound of sugar, one-half pound flour, ten eggs, one-half pint of milk, one-fourth ounce citric or tartaric acid, a little lemon essence and salt. Or, mix together one heaping tablespoonful of corn starch and one cupful of sugar; add a cupful of boiling water, and boil five minutes. Add a teaspoonful of butter, the juice and grated rind of one lemon, and one well-beaten egg. Bake between two crusts.

Frosting for Lemon Pies.—Pulverized sugar, four ounces, white of six eggs beaten to a stiff froth. Mix.—Family Herald, Jan. 15, 1895.

PRUNE PUDDING.—Wash half a pound of prunes, cover with cold water and let stand over night. In the morning cook until tender, then press through a colander; add three-quarters of a cup of sugar, stir until it is dissolved. Beat the whites of four eggs to a stiff, dry froth, add them to the prunes, and bake twenty minutes in a quick oven. Serve with cream.—Zion's Home Monthly, H. W. Naisbitt, Editor.

RICE—MODE OF COOKING. To one pint of rice put three quarts of boiling water and one-half teaspoonful of salt. Boil it just fifteen minutes; drain off water, set back, with cover off to steam, fifteen minutes. —Dr. Chase.

Spiced Vinegar for Pickles Generally.—Bruise in a mortar two ounces black pepper, one ounce ginger,

one-half ounce allspice, one ounce salt, one-half drachm cayenne. Put these in a stone jar with a quart of good cider vinegar, and cover them with a bladder wetted with the pickle, and over this a piece of leather. Set the jar near the fire for three days, shaking it three times a day, then pour it on the pickles. To save time it is usual to simmer the vinegar gently with the spices. For cucumbers, cabbage, etc., it is used cold.—Dick's Encyclopædia.

SWEET PICKLES.—One peck green tomatoes, one-half peck onions. Slice and sprinkle over them in pan three handfulls of fine salt. Mix. Should stand over night. Rinse off with cold water. Place in kettle and cover with good vinegar. Now add one-quarter pound of mustard, one teaspoonful of black pepper—some whole, one-quarter teaspoonful or less cayenne, one ounce whole cloves, one desert spoonful ground ginger, one-half ounce allspice, two teacups of sugar, or less, to taste. Boil fifteen or twenty minutes.—Mrs. Mary Jane Phillips, City.

TO SHELL BEANS EASILY AND TO REMOVE THE SKINS ROM APPLES.—Pour upon the pods a quantity of scalding water, and the beans will slip very easily from the pod. By pouring scalding water on apples the skin may be easily slipped off, and much labor saved.—Exchange.

SEASONING. — Housekeepers should prepare their seasoning, and keep a supply on hand. Parsley, thyme, sweet marjoram and sage should be kept dried in bunches. The roots and stalks and leaves of celery may be dried in the oven, grated and bottled for use. A jar of mixed seasoning may be made as follows: Take one ounce each of nutmeg and mace, two ounces each of white pepper and cloves, one ounce each of sweet basil,

marjoram and thym, and half-an-ounce bay leaves. Dry, pound and pulverize; sive, bottle, cork and set away for use. One teaspoonful of the mixture will season a gallon of soup. A pinch added to gravy or hash will give it a delightful flavor.—Exchange.

TO PREVENT THE FORMATION OF A LIME CRUST IN TEA KETTLES.—Keep an oyster shell in your tea kettle. By attracting the stony particles to itself it will prevent the formation of lime crust.—Family Herald.

Lemonsnaps.—One large cup of sugar, two cups of flour, one-half cup of butter, two eggs, two tablespoonfulls of hot water, one-half teaspoonful soda, flavor with lemon to taste. Roll very thin. Bake in moderate oven.

—Modern Cook Book.

Date Cake.—Take 1 cup of sugar, half a cup of butter, 1 egg, 1 cup of water, 1 cup of dates stoned and chopped fine, 1 cup of raisins stoned and chopped, $2\frac{1}{2}$ cups of flour, $1\frac{1}{2}$ teaspoons of baking powder.—Lisa.

Brown Bread.—Take 2 cups of corn meal, 1 cup of flour, half a cup of molasses, a little salt, 1 teaspoon of cream of tartar, 1 teaspoon of soda, 2 cups of sweet milk; steam two hours over a kettle of boiling water. This has taken the premium at our county fair several times.—Mary S. Welsh.

Mushrooms.—How to Cook.—Peel the mushrooms, remove the stalks, and put them in a granite sauce-pan with a little salt on the back of the stove to draw the juice. Draw the pan forward, and simmer for about twenty minutes, or until the mushrooms are tender. Add a little milk, pepper and salt to taste, a teaspoonful of buttetr to each cupful of mushrooms, add a little thick-

ening, if desired. Pour upon slices of well-toasted bread, and serve at once.

MUSHROOM CATSUP, allow half a pound of salt to each peck of mushrooms; and to each quart of mushroom-liquor one-quarter ounce of cayenne, half an ounce of allspice, half an ounce of ginger, two blades of pounded mace. Let the mushrooms be fresh, and gathered in dry weather; put a layer in a deep bowl, sprinkle salt over them, add another layer, and so on alternately. Let them remain a few hours, then break them up with the hand. In this condition, set them away for three days in a cool, dry place, occasionally stirring and mashing them in order to extract the juice. Now measure the liquor without straining, and add the spices. Put all into a stone jar, cover closely, and set the jar in a kettle of boiling water, and boil for three hours. Now pour into a stewpan, and boil for half an hour longer, then pour into a jug, and set in a cool place until next day, when it should be strained into very dry clean bottles, and securely corked. -Mrs. D. F. H.

POTATO YEAST.—Pare and boil eight or ten potatoes thirty minutes; when boiling put in another kettle, a handful of fresh hops, and three quarts cold water, cover and let boil; when the potatoes are cooked drain off and mash very fine; strain the boiling hop water into the mashed potatoes, stir well and add one half cup of sugar and one quarter cup of salt and one pint of flour; stir well again and let it stand until blood warm; stir in a cup or cake of yeast. Cover close, set to raise in a warm place until fomentation ceases.

Place for use. Yeast made from potatoes is healthy and will soon gain converts to itself because of its

superior lightness and delicacy-of flavor.—Prof. H. S. Burt.

YEAST.—SALT RISING.—Take two or three quarts of new milk, stir in flour until it is of sufficient thickness; set in a dish containing water nearly as hot as you can bear your hand in; keep it as near the same temperature as possible: in six or seven hours it will be up, unless the flour is too fine, if it is, add a little graham or corn meal; have your flour and some warm milk ready; put in the sponge and as much of the milk as is necessary to make the dough sufficiently thin; make in loaves and set in a warm place to rise; when sufficiently light, bake, and you will have as good and light bread as you ever tasted.—Scammel's Cyclopædia.

YEAST.—To a pint of new milk put one teaspoonful of salt on a large spoonful of flour; stir well and keep it luke warm by the fire, and in an hour it will be fit for use. Twice as much must be used as of common yeast. If sour put in saleratus, a teaspoonful to one pint of yest; when ready for use if it foams up lively it will raise the bread.—Scammel's Cyclopædia.

YEAST CAKES, HOME MADE.—ESPECIALLY ADAPTED FOR SUMMER USE.—Mix corn meal with good, strong potato yeast, (adding a little salt), to dough; roll out the dough thin and cut out into cakes, and dry quickly on boards in the sun. Store in dry, cool place. One cake makes four baker's loaves.—Mrs. O. Bess, City.

YEAST CAKES. -Boil six potatoes in one quart of strong hop tea. When soft mash them fine, and to this, when luke warm, add one cup of flour, one half cup of sugar, one tablespoonful of ginger, one cup of

yeast. Set this sponge in a warm place to rise. When light, stir in enough corn meal to make it quite thick. Let it rise over night. Then mould it out and cut it into single cakes and lay them out to dry on a board in the shade (or sun). Can or box them up and keep in a dry, cool place.——E. J. Burroughs, Bridgeport, Conn.

FISH CULTURE.—Let me here inject a stimulant for the consideration of our own people from the pen of Colonel John T. Crisp, State Fish Commissioner for Missouri: "Utilize the splendid water which is so cheap and plentiful. It is too valuable to go to waste. Brought under control, after the first, second or third year, or three times quicker than fruit trees can be brought to bear, it will yield you from 2,000 to 3,000 pounds per acre of bass or crappie fish food, which upon your table or in the market, fresh from your lake, will command 121/2 to I8 cents per pound." Now suppose we use his lowest figures for an illustration, and we have an income of \$250 per acre after the third year's planting the fry, and should we use his highest figures, the result would be \$540 to every acre of water stocked with these fishes, and that too with no other expense than attatches to catching and marketing. If ponds or lakelets were built so that they could be readily drained, the cost of catching would be nominal. - Utah Fish Commissioner.

NOTE.—In France, they consider one acre of water, for fish culture, to be worth two acres of farm land.— *Editor*.

Land.—Pope who lived some 2000 years ago, said: "Large farms will do to admire, but cultivate small

ones." True economy will say, "give us a small farm well tilled." In Europe, where land is scarce they trench deep, turning up the virgin soil, and use a liberal supply of fertilizers, and "double and treble" the products of the soil. He who can make two spears of grass grow, where only one grew before, not only increases his own wealth, but he becomes a benefactor to the race. The washed sands which often become a nuisance in our water courses, are rich in fertilizing elements, and can be applied to the garden and field with profit.——Editor.

Lime Water and Milk.—Worth Knowing: Experience proves that lime water and milk are not only food and medicine at an early period of life, but also at a later, when digestion is feeble and the stomach unfit for its duties, as is shown by the various symptoms attending indigestion. The stomach will resume work, and do it well, simply on a diet of bread and milk and lime water. A bowl of milk may have three tablespoonfulls of lime water added to it with good effect.—Edwin Fray, London.

Dr. H. K. Chapman of N. Y. recommends lime water and milk very highly.—*Editor*.

LIME WATER.—It is an anti-acid tonic. Kills worms, and frees the bowels from slimy and morbific matter. It promotes digestion; it is valuable in looseness, scrofula, diabetes and female weakness. Mixed with a decoction of Peruvian bark, it wonderfully strengthens the debilitated and those threatened with atrophy.—Dick's Encyclopædia.

Laundry.—A METHOD OF WASHING, OCCUPYING ONE Hour: Have a preparation made from two tablespoonfuls alcohol, two tablespoonfulls turpentine, one half

lb. soap cut fine and mixed in one quart hot water. Pour the same into a large tub of boiling water and allow white clothes to soak, covered closely for 20 or 30 minutes. Wring out, and put them in a tub of clean luke warm water for ten minutes. Afterwards boil them in a like quantity of the above preparation for five or ten minutes, and rinse in cold, blued water. Soap risbands and other soiled places. The same water that has been used for the white clothes will do for the colored. No injury to clothes. The modern patent Ringer, is a great blessing to the toiling wash-woman.

The above is a very excellent receipt, and may be relied upon as being effective and labor saving.—J. Marquart, in Recipes Worth their Weight in Gold.

NEW MODE OF WASHING.—GERMAN.—dissolve 2 pounds of soap in three gallons of water, as hot as the hands can bear, and adding to this one teaspoonful of terpentine and three of liquid ammonia. The mixture to be well stirred. Steep lined in it for 30 minutes covered tightly. Wash out and rinse. When water is re-heated add one-half as much turpentine and ammonia. No injurious effect.—Rural New Yorker.

Kerosene Oil in Washing.—Cut up a bar of soap in a dish and set on the stove; when melted, put in four teaspoonfuls of kerosene oil, let this get good and hot, and pour it into one half tub of water; put your clothes in this and let them soak over night. In the morning simply boil and rinse, wring and hang out. No rubbing required.—Mrs. Ellsworth, Queen of the Household.

Washing. - All things having been made ready for the washing, the laundry maid's motto should be: Soak out, steam out, press out, wring out, and boil out the dirt, as

much as possible, using but little if any hand rubbing. The simplest and most practical way to accomplish the above object, is as follows:-Sort over white clothes, and rub on collars, risbands and all soiled places, with a small brush, a little soft soap or melted soap. Put clothes in a good sized tub of warm suds, and allow them to soak from early rising till after breakfast. Now stir and souse them good and drain off the dirty water, and add, gradually heating up, good, strong, hot suds, deeply, covering closely with blanket or quilt, to keep in the heat and steam; when they may be allowed to soak and steam for twenty or thirty minutes. After steaming the clothes, give them a good sousing and pass them quickly through a good patent wringer. When the clothes are very dirty, they may be soused and put through the Ringer washer, for the second time. Now put the clothes loosely and gently, without crowding into a boiler of good suds and boil them for five or ten minutes: then dash into the boiler a little cold water, when the clothes can be taken out without danger of scalding the hands. Pass the clothes once more through the wringer. Now simply rinse the clothes in water slightly blued, wring them out, and hang them out to dry. The above method is much better than the old fashioned way of rubbing the clothes to pieces on the back breaking and side splitting wash hoard. The colored clothes can be treated in the same manner as the white clothes, save boiling. The suds for soaking the colored clothes should not be made too hot or too strong, as the colors will fade. In case the above method is strictly followed, clothes, time, labor and money will be saved; and the clothes will be white and beautiful. - Practical Chemist.

BLANKETS TO WASH.—Put three tablespoonfuls of powdered borax and one pint of soft soap (or its equivalent of dissolved bar soap) into a tub of cold, soft water. Stir well to dissolve, and mix; then put in the blankets, thoroughly wetting, and let them soak over night. Next day souse and pound them, and drain them out, and rince thoroughly in two waters, not too hot, pass through patent wringer and hang them out to dry. Undershirts, etc., of wool, can be washed in the same way.—Boston Journal of Chemistry.

Borax, as used by the wash-women of Holland and Belgium, so proverbially clean, and who get up their linen so beautifully white, do it by the use of refined borax,—kept by druggists;—as a washing powder, instead of soda, using a large handful of borax powder to ten gallons of boiling water, saving in soap nearly half. All of the large washing establishments adopt the same plan. It does not injure clothing.—Youman's Dictionary of Every Day Wants.

Powders.—Home Washing Powders, Etc.—No. 1 Formula: Sal soda two pounds, refined borax one pound, carbonate of potash (salts of tartar) two ounces, muriate of ammonia powder one and one-half ounces; pulverize all and mix thoroughly, put into a large mouthed bottle and cork tightly for use. Use one table-spoonful to each boiler of clothes, and half as much for each additional boiler, and the same amount to tub of clothes for soaking.—Boston Journal of Chemistry.

No. 2 Formula: Effloresced soda, (slacked in the air,) ninety parts; Hyposulphate of soda, ten parts; Borax, two parts.—Scientific American Cyclopædia.

Borax is valuable for laundry use instead of soda.

Add a handful of it, powdered, to about ten gallons of boiling water and you need use only half the ordinary amount of soap. Used by the wash-woman of Holland, and also by many of the steam laundries; it will not injure cloth; answers well for scouring purposes, and as a wash for the hair and teeth.—Dr. Chase.

Borax is now used in some places in washing clothes, as a substitute for or an addition to soap, which it resembles in its effects, while it does not disturb the colors; it is used in very small proportions.— *U. S. Dispensatory*.

Hard waters are rendered very soft and pure (rivaling distilled water) by merely boiling a two ounce bottle in a kettle full of water, carbonate of lime will adhere to bottle; the water boils much quicker at the same time.

— American Cyclopaedia.

Leanness.—Is caused generally by lack of power in the digestive organs to digest and assimilate the fat producing element of food. First restore digestion, take plenty of sleep, keep a clear conscience, drink all the water the stomach will bear in the morning on rising, take moderate exercise in the open air, eat, oatmeal, cracked wheat, graham bread and mush, rice, and sago, and foods containing starch and sugar; baked sweet apples, and other sweet fruits and berries, roasted and broiled beef, cheese, peas, and beans, and rich, nutritious fruit cake. Dismiss all anxious thoughts and care when you sit down to a meal; be thankful and be in charity with all men. Eat very slowly and masticate thoroughly. Rest an hour after dinner. Cultivate jolly people, and bathe daily .- Mrs. F. L. Gillet, Chicago, J. H. Ayers, A. M. and M. D.

Liniment.—Mexican Mustang Liniment: Take two fluid ounces petroleum, 1 fluid ounce ammonia water, and 1 fluid drachm brandy. Mix.

Wonderful Ointment.—The following liniment is good for all sprains, bruises, lameness, etc. Take one pint of 95 per cent. alcohol, and add to it the following—oil of sassafras, balsam of fir, chloroform, of each one-fourth ounce; oil of spike, origanum, hemlock, wormwood, of each one ounce; sweet oil 2 ounces; spirits of ammonia, gum camphor, spirits turpentine, of each 1 ounce. This is an unequalled horse liniment, and by omitting the turpentine, it constitutes one of the best liniments ever made for human ailments such as rheumatism, headache, neuralgia burns, etc. Where the pane is internal a few drops can be taken on a lump of sugar.—Dick's Encyclopædia.

Lime Water.—A FRIEND TO EVERYONE: So invaluable for all ages, is simply made from 2 ounces of builder's unslacked lime to each quart of boiling water. On this after standing all night, a scum will appear, which throw off and decant the clear water for use. One tablespoonful to be taken in half a teacup of milk, in a morning—ill or well—according to desire, which adds to health—and the best of health even from an infant to an adult, or extreme age. Try it.—Edwin Fray, London, England.

Lemons.—Last Use of: "If you ever use lemons," remarked one housewife to a lady friend, "and have a portion of one left over, be sure you do not throw it away." "I am never without them in the house as I always use them for flavoring; but of what use are pieces?" "Just this, the next time you think you have

done with a lemon, just dip it in fine salt, and rub your copper and brass kettles and stewpans with it, and rub the articles instantly with a dry, soft cloth. Every stain dissappears as if by magic, leaving a brilliant surface." Exchange, 1895.

Learn the Pulse.—Every intelligent person should know how to ascertain the state of the pulse in health; then by comparing it with what it is when he is ailing, he may have some idea of the urgency of his case. An infant's pulse is one hundred and forty; a child of seven, about eighty; and from twenty to sixty years it is seventy beats a minute, declining to sixty at four score. A healthful grown person's pulse beats seventy times in a minute: there may be good health down to sixty; but if the pulse always exceeds seventy there is a disease: the machine is working itself out, there is a fever or inflammation somewhere, and the body is feeding on itself; as in consumption, when the pulse is quick, that is, over seventy, gradually increasing with decreased chances of cure, until it reaches one hundred and ten or twenty, when death comes before many days. When the pulse is over seventy for months, and there is a slight cough, the lungs are affected. - Zion's Home Monthly, 1804, H. W. Naishitt, Editor.

Liver Complaint and Fever.—Buttermilk is good, especially in fever, as an article of diet. A cup of fresh buttermilk, two or three times a day is a sure cure for liver complaint. Buttermilk is much easier to digest than new milk.—Prof. H. S. Burt, New York.

La Grippe Cure.—No. 1. Four grain pill of asa-foetida, one pill four ties a day on empty stomach.— Exchange. No. 2. Asafoetida pills will cure la grippe. Dose, two small pills on going to bed, with a good hot brandy sling.—Mrs. Anna Thompson, South Cottonwood.

Lawn—How to Set the Color in.—Dissolve one-fourth pond saltpeter in three pailsfull of water and dip the lawn in it several times before washing.—Edison's Encyclopædia.

Lemon Sugar.—Formula: Take one ounce crystalized citric or tartaric acid, rub it fine, and mix thoroughly with one pound of dry pulverized white sugar, put in a single drop of oil of lemon peel to flavor it, and mix well; preserve in closely stoppered bottles for future use. Used as a substitute for lemons in making summer drinks, lemon pies, etc. In making lemonade, the addition of a very little bicarbonate of potash to each tumblerfull just before drinking will give a wholesome, refreshing, effervesing drink,—British and Colonial Druggist.

For making lemonade, one pound of citric or tartaric acid is equal to twenty dozen lemons, a saving to the housewife, in comparison to the use of lemons, of some 500 or 600 per cent.—Scientific American Cyclopaedia

Massage Cures.—Should a person or child tumble down and limbs or back be hurt, nothing one can apply will as quickly prevent coagulation of blood or soreness as instant massage. The why and wherefore is quite simple, yet wise. The blood is congested as the skin is struck, especially in soft, boneless places of the body. The clots prevent newer and better blood passing into the bruised veins, and the transparent skin reveals the dark condition. Manipulation of this skin by the fin-

gers presses the fresh blood into the bruised places; it loosens the clotted blood and carries it off, thus restoring a normal circulation. This remedy is so simple that it will possibly be forgotten, but it is a rather good bit of wisdom to keep stored away for times of emergency. Many physicians are applying massage for fractures, and especially for sprains. Also nothing is so effective for a sprained ankle. The patient should, if possible, rub the joint of the ankle all the time, and have massage delivered by others four or six times a day. Not only is the cure as speedy as under other doctoring, but also the constant relief afforded to the soreness reacts on the nervous system. The same method applies to a sprained wrist or shoulder, and it is excellent in case of a sprained back. - Professional Friend, Boston Globe, Nov., 1894

Measles.—Measles are carried safely over by the free use of lemon or saffron water, sweetened to taste.

Milk, Hot.—A glass of hot milk, taken in small sips when one is fatigued is very retreshing and strengthening. Toasted bread and milk is good for supper.—
Dr. Chase.

Mice.—Gather any kind of mint and scatter about your shelves or places infested, and they will forsake the premises.—S. A. Cyclopædia.

Nutritive Value of Different Kinds of Food for Farm Stock.—Per cent.:

ž		FAT PRODUCING	
Turnips	1	5	7
Rutabagas	1	7	9
Carrots	1	7	10

FLE PRODL		FAT PRODUCING	TOTAL PER CENT. NUTRITION
Mangels 2	2	8	12
Straw 8		16	22
Potatoes		17	23
Brewer's grains		18	27
Hay (early cut)		51	64
Rye1		74	88
Oats1	2 6	33	80
Corn1		53	80
Wheat and Barley1		36	83
Beans, (Field)2		46	74
Peas2		61	89
Bran and coarse millstuff		54	90
Linseed cake		56	90
Linseed		60	95

"The above table was made up from the experiments and analysis of the most eminent agricultural chemists and English feeders."—Dr. Chase.

Night Sweats.—To Arrest Night Sweats: No. 1. Salt water, sponge bath at night.

Sponge Bath—No. 2. Alcohol 1 part, water 2 parts.—Dr. Kellog.

Nipples Sore.—The best thing for sore nipples is to bathe them frequenly in a weak solution of burnt alum in water. No ointment to be used.—Fray's Golden Receipes.

Neuralgia.—A Cure for Neuralgia: No. 1. Neuralgia, that arch enemy of womankind, is the combined result of nervousness and cold; therefore expose yourself as little as possible and keep your nervous system well in hand. But when the ounce of prevention

has failed to ward off the attack it is well to know what to do. The remedy which I have found the most efficacious which is attended by no evil consequences, is to apply cotton batting dipped in white of egg and covered thickly with black pepper; the thicker the better; to the aching part, tying it securely with a large handkerchief. It will not afford instant relief, but one feels the benefit of the counter irritant very soon, and before long, if patient, the neuralgia is a thing of the past.—People's Home Journal, Aug., 1894.

- No. 2. For this distressing malady there is a very simple and efficient remedy. We have tried it with uniform success. It is this: Get a piece of the common sal ammoniac, and every hour or so bite off a piece as big as a pea and swallow it. If more convenient wash it down with water, or dissolve half a drachm of the sal ammoniac in an ounce of water, and take a tablespoonful every three minutes or so. An overdose can do no harm. In from one to three hours relief will be obtained in four-fifths of the cases.—Vox Populi.
- No. 3. The simplest and best remedy for neuralgia is to wear well pounded brimstone on the sole of the foot contrary to the pain side; or, cayenne, sprinkled on hot flannels afford instant relief; or very hot hops applied in a bag. Try it.—Fray's Golden Receips.

Oatmeal Cheap.—Buy good sound plump white oates, grind, and sift out the meal for use.—Local Item. Editor.

Oatmeal.— Liebig had shown that oatmeal is almost as nutritious as the very best beef, and that it is richer than wheaten bread in the elements that go to form bone and muscle.— *Dr. Chase*.

Oatmeal to Cook in an Earthen or Stone Jar.—To one cup of coarse oatmeal, add one quart of cold water, in a stone jar; set it in a kettle of boiling water and boil one hour; do not stir it. Serve with sugar and cream.

—Alice Kimball, Winfield, Iowa.

Onions.—How TO REMOVE THE SMELL OF ONIONS FROM THE BREATH: Parsley eaten with vinegar will remove the unpleasant effects of eating onions.—Edison's Encyclopædia.

Onions.—Onions sliced and placed in a sickroom, as a disinfectant have no equal.—Dick's Encyclopædia.

Pillows.—The most wholesome pillow is made from cuts of unprinted paper.

Pimples.—Pimples are often caused by excessive eating or drinking, which the liver objects too; every blotch or pimple speedily disappears by taking a little flour of sulphur before breakfast.—E. F.

Pneumonia.—Pneumonia may be cured by the application of linseed poultices to the chest and back. In severe cases add a few drops of olive oil and turpentine.

—Mrs. James Sterling, 9th Ward, City.

Public Speakers and Singers.—Borax is an excellent remedy for hoarseness or loss of voice, common among public speakers and singers. A few minutes before exercising the vocal organs, dissolve a small lump of borax in the mouth and gradually swallow the solution. This acts upon the orifice of the glottis and the vocal cords precisely as "wetting" acts upon the notes of the flute.—Techno Chemical Receipt Book.

Pills of Great Value.—The best pills in use are made from equal parts of bitter aloes, Turkish rhubarb, and senna leaves, dried in the oven and rubbed to powder; these to be mixed in a little whiskey to form a paste.—E. Fray.

Pills.—Rhubarb in No. 60 powder 200 grains. Purified aloes in fine powder 150 grains. Gum Myrrh in fine powder 100 grains. Oil of peppermint 10 grains. To make 100 pills. Beat them together with water so as to form a mass, and divide it into 100 pills. Dose from 2 to 4 pills twice a day.—U. S. Dispensatory.

Poison Ivy.-Grows in woods, fields, and along fences from Canada to Georgia. It flowers in June and July. When wounded it emits a milky juice which becomes black on exposure to the air, and leaves upon linen and other cloth a stain which cannot be removed by washing with soap and water. The susceptibility to the influence of the poison is various; some persons handle the plant with impunity, while others are much affected with the poison, and suffer severely for many days, being scarcely able to move. The swelling of the face is sometimes so great as to almost entirely obliterate the features. The poison produces itching, redness, a sense of burning, etc. The effects are experienced soon after exposure, and usually begins to decline within a week. A light cooling regimen, simple diet, with saline purgatives, and the local use of cold lead water, are the best remedies. Alkaline applications are good. According to the late Prof. Proctor, who was himself very susceptible to this poison, a weak alkaline solution, applied immediately after exposure seldom fails to prevent the effects of the poison.

- Dr. A. Livezly, of Lumberville, Pa., strongly recommends a saturated tincture of lobelia, as a local application in this affection. He applies it by means of linen or muslin cloth.
- Dr. A. C. Canfield, of California, has found an invariable antidote to the effects of Poison Ivy in the plant *grindelia hirsutula*, applied to the part either simply bruised or in the form of a strong decoction.

Note—The common yard plantain will answer the same purpose.—Dr. Guan.

Cold lead water, (acitate of lead), is sometimes used—U. S. Dispensatory, New Edition.

Piles.—SIMPLE REMEDY FOR PILES: Take fresh, white pine pitch—balsom—in pills from 4 to 6 a day for a month and bathe parts in cold water often. A very obstinate case of piles was cured by this treatment.

EXTERNAL REMEDY FOR PILES.—Boil some of the inner bark of white oak in water, and strain; evaporate to a thick extract. To one half pint of this extract, add one half pint of oil rendered from old, strong bacon. Simmer together till mixed and let it cool. Apply inside the rectum every night until cured.—Dick's Encyclopædia.

Perspiration.—To Produce Perspiration: Hore-hound, yarrow and catnip tea. Dose one tablespoonfal or more every half hour.—Herbalist.

Poultry Points.—At the Experiment Station at Calhoun, Ala., they have made a four-year's test of several breeds for egg production and for general purpose fowl. Last year (1894) the Plymouths led in number of eggs produced, closely followed by Brown Leghorns, Ham-

burgs and Langshans. The year previous (1893) the Leghorns led. The European breeds are all great spring and summer layers, are small and non sitters. It is pretty well established that the Leghorns are the best egg producers of all the breeds. The Asiatics are generally good winter and early spring layers, and make exelent mothers and are good table fowls. The Langshans stand at the head of the list, and are regarded as one of the best general purpose fowls. The Plymouth Rocks are also good winter and spring layers and make excellent mothers. They are hardy, of quick growth, and good table fowls. Of the breeds mentioned the Langshans and Plymouth Rocks are considered the best general purpose fowls, the Leghorns and Hamburgs the best egg producers.

Such are the conclusions reached after several years' experience, the hens being confined during the time in small pens, and fed only on vegetable products raised on the farm. Were a wide range possible for them the result might be different.

Rheumatism.—Those persons afflicted with rheumatics, should try, perseveringly, some one or more of the following simple methods of conquering this terrible malady: Bathe in, and drink freely of the Hot Springs water. Sun baths are also highly recommended. Be temperate in eating and drinking, as "rheumatism and gout are near of kin." Keep the bowels regular, using buttermilk as a beverage, and wear flannel next to the skin, winter and summer. Manual exercise, sufficient to cause copious perspiration, will often give relief. Care being taken not to take cold. Some have found relief by bathing often in the briny waters of the Great Salt Lake.

In case the foregoing method does not bring to the patient the desired relief, the following treatment may be adopted:—*Editor*.

RHEUMATISM CURED WITHOUT DRUGS.—LINSEED POULTICE, How to Make: Boil from six to eight large onions for one hour. Take the hot liquid and mix with linseed meal for poultice. When the poultice is ready, cover the face of it with white mosquito bar or cheescloth, dipped in hot olive oil, and apply to the joints or parts affected, as hot as they can bear. Wrap extra cloths, cotton or linen, around the poultice to keep in the steam and heat. Change poultice every fifteen or twenty minutes. Should pain move follow it up with the poultice.

In very severe cases, a poultice can be made as follows to alternate with the onion juice poultice:—Mix one pint of linseed meal with one tablespoonful of turpentine. A permanent cure should be effected by the use of from three to seven poultices, or in less than

one half day. Avoid drafts and taking cold.

After poulticing, the following linament may be used:—The whites of two eggs beaten up with olive oil. Mrs. James Sterling, City.

CELERY AS A CURE FOR RHEUMATISM.—New discoveries—or what claim to be discoveries—of the healing virtues of plants are continually making. One of the latest is that celery is a cure for rheumatism; indeed it is asserted that the disease is impossible if the vegetable be cooked and freely eaten. The fact that it is almost always put on the table raw prevents its therapeutic powers from becoming known. The celery should be cut into bits, boiled in water until soft, and the water

drank by the patient. Put new milk, with a little flour and nutmeg, into a saucepan with the boiled celery, serve it warm with pieces of toast, eat with potatoes and the painful ailment will soon yield. Such is the declaration of a physician who has again and again tried the experiment, and with uniform success. He adds that cold or damp never produces, but simply develops, the disease, of which acid blood is the primary and sustaining cause, and that while the blood is alkaline there can be neither rheumatism nor gout. English statistics show that in one year (1876) three thousand six hundred and forty persons died of rheumatism, and every case, it is claimed, might have been cured or prevented by the adoption of the remedy mentioned. At least two-thirds of the cases named heart disease are ascribed to rheumatism and its antagonizing ally, gout. Small-pox, so much dreaded, is not half so destructive as rheumatism, which, it is maintained by many physicians, can be prevented by obeying nature's laws in diet. But if you have incurred it, boiled celery is pronounced unhesitatingly to be a specific.—New York Times, 1894.

Roots.—How to REAT FROZEN ROOTS: Potatoes, beets and other roots which have been frozen, may be restored to their normal condition by immersing in cold water until the frost is all out. I have recently tested this method with sugar beets and mangels with satisfactory results.—Samuel Edwards, Ill., American Agriculturist, Feb. 9, 1895.

Save a Little.—Every man who is oblighed to work for his living, should make a point to lay up a little money for that "rainy day" which we are all liable to encounter when least expected. The best way to do this is to open an account with a savings bank. Accumulated money is always safe, is always ready to use when needed. Scrape together five dollars, make your deposit, receive your bank book, and then resolve to deposit a given sum, small though it be, once a month, or once a week, according to circumstances. Nobody knows, without trying it, how easy a thing it is to save money, when an account with a bank has been opened. With such an account a man feels a desire to enlarge his deposit. It gives him lessons in frugality and economy, weans him from habits of extravagance and is the very best guard in the world against intemperance, dissipation and vice.—Edison's Encyclopædia.

Spending Money.—Never buy an article because it is cheap. Pay cash for everything, and pay as you go, and if possible buy at wholesale rates, and insist upon having good measure and good weight. The credit system should be abolished, as it gives licence to rogues—it is ruinous to seller and buyer.—*Editor*.

Sarsaparilla.—AYER'S SARSAPARILLA: Fluid extract of jamaica sarsaparilla, 3 ounces; fluid extract stilling1a, 3 ounces; fluid extract yellow dock, 2 ounces, fluid extract may apple, 2 ounces; sugar, 1 ounce; iodide of potassium, 90 grains; iodide of iron, 10 grains. Mix, bottle, and cork tightly.—Ex.

Summer Drink.—Lemon juice, cold water, sugar and cream of tartar, make an exceedingly wholesome summer drink. The use of cloves stays the craving for strong drink. Which use according to desire.—*Prof. E. Fray, London, Eng.*

Sugar. - Save Your Sugar. —All housekeepers should know that sugar boiled with an acid, if it be but three

minutes, will be converted into glucose, which is the form of sugar found in apples. One pound of sugar has as much sweetening power as two and one-fourth pounds of glucose; in other words, one pound of sugar stirred into the fruit after it is cooked and while yet warm, will make the fruit as sweet as two and one-fourth pounds added while the fruit is boiling.—Late Edition Farm and Household Cyclopædia.

NOTE.—Dr. Kedzie, a noted German chemist, says "one half the sugar is lost by boiling in fruit."

Summer Complaint.—Camphor, laudanum and olive oil, equal parts. Dose: One teaspoonful two or three times a day.—Mrs Bellinda P. Musser.

Stimulant.—Beat up an egg and add milk and a little brandy.—Dr. Anderson.

Sun Cholera Cure.—Tincture of laudanum, tincture of capsicum, essence of peppermint and spirits of camphor, equal parts. Dose: A teaspoonful after each evacuation of the bowels.—N. Y. Sun.

Small Pox Cure.—Edward Hine, in "Liverpool Mercury." The worst case of small pox cured in three days: one ounce of cream of tartar dissolved in a pint of water, drank at intervals, when cold, is a certain neverfailing remedy. It has cured thousands; never leaves a mark, never causes blindness, and avoids tedious lingering.—Boston Post.

Sponge Bath.—At times a sponge bath may be taken to advantage. It requires but few appliances, but little preparation, and can be taken quickly, and with but little expense. It is also healthy and invigorating Alcohol one part, water two parts. Sponge the

body off quickly and rub down with a moderately coarse towel, until the skin is all in a glow.—Ex.

Sleep.—Why do physicians recommend their patients to sleep on beds standing north and south? That the current of magnetism constantly passing around the earth from south to north may pass through the body in a lengthwise direction. It has been found that a class of nervous invalids lying with their heads east and west, will become restless and uneasy for no apparent cause, and their sleep will be unrefreshing, and of short duration: changing the position so that the head shall be towards the north or south, and the patient becomes quiet and restful, and the sleep sound and refreshing.

—J. H. Ayers, A. M., M. D.

Note.—The French Academy of Science claim to have proven the above theory to be correct; but recommend to sleep with the head to the north.—Ed.

SLEEP AS A MEDICINE.—A physician says the cry for rest (sleep) has always been louder than the cry for food. Not that it is more important, but that it is often harder to obtain. The best rest comes from sound sleep. Of two men and women, otherwise equal, the one who sleeps the best will be the most moral, healthy and efficent. Sleep will do much to cure irritability of temper, peevishness and uneasiness. It will restore to vigor an overworked brain. It will build up and make strong a weary body. It will cure a head-ache. It will cure a broken spririt. It will cure sorrow. Indeed we might make a long list of nervous and other maladies that sleep will cure. The cure of sleeplessness requires a clean, good bed, sufficent exercise to produce weariness, pleasant occupation, good air and avoidance of stimu-

lants and narcotics. For those who are overworked, haggard, nervous, and who pass sleepless nights, we recommend the adoption of such habits as shall secure sleep, otherwise life will be short and what there is of it sadly imperfect.—Dr. Chase.

SLEEP.—An easy mind, a good digestion and plenty of exercise in the open air, (after supper walk a mile) are the grand conducives to sound sleep.

A pillow stuffed with hops, it is said, will induce sleep when other things fail.—Dr. Gunn.

No. 2. One hours sleep, before midnight is worth three after. Early risers are long livers.—Fray's Golden Recipes.

SLEEP.—I hold that one hour's sleep before midnight is equal in its beneficial effects upon the body to two hours after midnight. I am not quite sure but that the proportion is even greater.

My reason for this statement is my own experience in the first place.

There are many theories in support of this fact, which may be merely hypothetical, however.

The fact remains that it is true.—Dr. Karl G. Mæser, Constitutional Convention, City Hall, March 11, 1895.

Sleeplessness.—Sleepless nights are prevented by eating a few grapes before going to bed, or by taking a teaspoonful of magnesia in a wineglass of water.

—E. Fray.

Shoes.—To make the soles of shoes last longer than the uppers: Apply two coats of copal varnish every two or three months.—Ex.

Sunshine.—Equally important with pure air in living apartments is sunshine. It carries with it radiance and cheer and vigor and good health. It is a purifier, warding off mold, moisture, gloom, depression and disease. It should be admitted to every apartment of the house, and made welcome at all times. It is a strong preventative to the disorders that visit shaded and musty places. It brings health and happiness that cannot be obtained from any other source. It is nature's own health-giving agent, and nothing can be substituted for it. It has no artificial counterpart. It does not only touch the physical body, but it reaches the mind and soul and purifies the whole existence of man. It may fade a carpet or upholstery, but it will bring color to the cheek, light to the eye, and elasticity to the step. The closed and shaded window may throw a richness of color upon the room, but it will bring paleness and feebleness to the occupants. This health agent is free to all, easily obtained, and one of the most economic health preservers we have, and ready to impart its efficacy to the rise of the curtain. - Zion's Home Monthly, Aug., 1894, H. W. Naisbitt, Editor.

Simple Cure for Hiccough.—All you have to do is to lie down, stretch your head back as far as possible, open your mouth widely, then hold two fingers above the head, well back, so that you have to strain the eyes to see them, gaze intently upon them, and take long, full breaths. In a short time you will be relieved of that troublesome hiccough. A case of six months standing has been cured by this treatment in a few minutes.—The Household, Boston, Jan., 1895.

Salve—OINTMENT.—The best ointment is made from

good, thick cream, buried a day or two in a cloth in the garden. -E. Fay, London, Eng.

Salve—Family Salve.—Take the roots of yellow dock, dandelion and plantain, steep, strain and simmer the liquid with sweet cream, or fresh butter and mutton tallow, or sweet oil and mutton tallow. Simmer together until no appearance of the liquid remains. Before it is quite cold add a few drops of otto of rose, and put it into boxes. This is one of the most soothing and healing preparations for burns, scalds, cuts, and sores of every description.—Dick's Encyclopædia.

Rose Lip Salve.—Four ounces sweet almond, two ounces mutton suet, one-quarter ounce white wax, one ounce spermaciti, ten drops otto of rose. Melt the suet, wax and spermaciti together, then add the other ingredients. Good also for chapped hands, etc.—Guide for the Million.

Sand Bag.—The sand bag is invaluable in the sick room. Get some clean, fine sand, dry it in a kettle on the stove. Make a bag eight inches square, of flannel, fill it with dry sand, sew the openings together, and cover the bag with cotton or linen. This will prevent the sand from sifting out, and will enable you to heat the bag quickly by placing it in the oven. After once using this you will never again attempt to warm the feet of a sick person with bottles of hot water or bricks. The sand holds the heat a long time.—Zion's Home Monthly, April, 1894, H. W. Naisbitt, Editor.

Sick Room.—On visiting a sick room chew a little ginger, which prevents contagion.

To keep the air in a sick room very pure, wet a

cloth in lime water and hang it in the room, or rooms, all over.—New York Medical Journal.

Barley Water.—No. 1. This is often most valuable during sickness, in rendering milk assimiable. Place in a granite kettle four tablespoonfuls of pearled barley, cover with two quarts of boiling water, boil five minutes and drain. Cover the barley with two quarts of freshly boiled water, cover the vessel and let it simmer gently about two hours, or until reduced to one quart. Strain. One quart of barley water to be used with two quarts of milk. In this connection an authority asserts with positiveness that typhoid fever, rheumatism, gout, and diabetes were absolutely curable without medicine.—Zion's Home Monthly, H. W. Naisbitt, Editor.

No 2.—Boil two ounces barley in two quarts of water till soft; pearl barley is the best, but the common barley answers very well. When soft, strain, and sweeten for use.—Ex.

Spring and Fall Medicine.—For catarrh, colds, croup, kidneys, etc., gather in the fall, when matured, the small pitch pine buds, and make into a syrup. Bottle for use. "Best thing on earth."—B. Pettit, City.

Sweet Breath.—Strawberries and raspberries make the breath sweet and agreeable, and removes all tartar from the teeth.—E. F.

Sight Dim.—For dim sight bathe the eyes with equal parts of vinegar, brandy and cold water.—Fray's Golden Recipes.

Stout Persons—Should refrain from eating swine's flesh, or much bread, and from the use of tea and coffee and spirituous liquors. From twenty to thirty crushed

nettle seeds, taken night and morning daily, is the best remedy for stout people, which will prevent burdensome fat surrounding the kidneys and stopping the heart. Tried with good results.—Fray's Golden Recipes.

Snake Bites.—Sweet oil, taken internally and applied externally is good for the bites of reptiles, scorpions and insects. The common yard plantain, bruised and applied to the parts affected is very good.—Dr. Gunn.

Soap—Hard Soap.—Sal soda, six pounds; Unslacked lime, four pounds; soft water, twenty-four quarts. Put all on the fire and boil, then set off and let settle. Drain off, and put over the fire with six pounds of clear grease and one-half pound rosin. Boil until it begins to thicken; throw in two handfuls of salt, or less. Pour into tub that water has stood in. When cold, cut and put where it can dry. This is a first-class soap. Will last a family of five persons one year.—National and Farmers' Cyclopædia.

Potash or Soft Soap.—Sal soda, one and one-half pounds; bar soap, two pounds, cut into small pieces; put them into a stone jar on the back of the stove, when not very hot, and pour over it a pailful of cold water; stir it once in a while, and after some hours, when thoroughly dissolved, but it away to cool. Flavor or scent with one-half ounce oil of sassafras. It forms a sort of jelly, and is excellent for all household purposes.—Dr. Chase.

Potash or Soft Soap.—From its cheapness, strength and superior solubility and cleansing properties, is preferred for many purposes, particularly for woolens and blankets.—Watts Chem.

Toilet Soap.—Beef tallow, two pounds; sal soda, two pounds: fine salt, one pound; one ounce gum camphor; one ounce oil of bergamot; one ounce of borax. Boil slowly one hour and stir often. Let stand till cold, then warm it over, so it will run easily and turn into molds dipped in cold water. This is very nice for all toilet purposes, and is greatly improved by age.—National and Farmers' Household Cyclopadia.

CASTILE SOAP.—No. 1. Olive oil, seven pounds; soda, one and one-quarter pounds; water sufficient. The soda must be rendered caustic before adding it to the oil, and heat then applied. An easy way of preparing the soda is to treat it in solution with powdered quicklime, equal parts. If desired, it may be mottled by adding a solution of sulphate of iron while in the liquid state.

No. 2. Boil common soft soap in lamp oil three and one-half hours. Perfume with essence of bergamot and oil of cloves. -Ex.

Sparrows.—The destructive sparrows and other birds. How to capture and exterminate: Soak a pint of wheat, or wheat screenings, in diluted whiskey or alcohol for some hours, till soft, then dust over it a little pulverised sugar or flour, and place the same where the birds can have free access to it. Watch close, and when the pests become stupified with their alcoholic meal, capture and cage them. When sobered up, they may be made to pay for their keep by converting them into a pot pie. Fine sport for the boys Try it. Snow birds, and black birds especially, make a toothsome dish.—*Editor*.

Soot Preventative.—By putting a handful of coarse salt on a coal fire, in the morning, now and again, when

first made up, there will be but little annoyance from foul smoke or soot, as it acts chemically on the smoke and soot, which is quickly consumed.

Some prefer to saturate the coal, as they use it, with a strong brine, six or eight tablespoonfuls of salt to a gallon of water. Tested.—*Editor*.

Stove Blacking.—Formula: Mix two parts of black lead; four parts coperas and two parts of bone black with water, so as to form a creamy paste. This is an excellent polish, as the coperas produces a jet black enamel, causing the black lead to adhere to the iron.—

Scientific American Cyclopædia.

Stove Pipe.—No. 1. To clean out a stove pipe or chimney, place a little scrap zinc on the live coals in the stove. The vapor produced by the zinc will carry off the soot by chemical decomposition. Bits of rubber hose will also answer the same purpose.—Scannel Receipt Book.

No 2. Stove Pipe and Chimney Cleaner.—Cheap and effective. How to proceed: During wet weather, or just after a storm, having taken every precaution against fire and accident, take a good bunch of old newspapers and place them in the throttle of the stove or chimney and apply a match. If not entirely satisfactory, add a little coal oil to the newspaper and repeat.—*Editor*.

Tar, the Various Uses of.—Poultry raisers, says C. W. Norris in the *Epitomist*, seem to have failed to learn the value of tar. It is valuable in many ways. I am led to believe that to tar the fence around the poultry-house, instead of whitewashing, will be much better. It will contribute largely to the durability of the wood, protecting it from storm and time. It is in the

poultry-house that the value of tar is the greatest, for it conduces greatly towards healthfulness. When cholera makes its appearance, we would advise, first, a thorough cleaning of the house, next, an application of tar on all joints, cracks and crevices in the inside of the building, and then plenty of fresh whitewash properly applied. The tar absorbs or drives away the taint of disease, and makes the premises wholesome. The smell is not offensive, in fact many people like it, and it is directly opposite to unhealthy. To vermin, lice, etc., the smell of tar is very repulsive, and but few will remain after you have tarred the house. A neighbor of ours was once troubled with chicken cholera, and by adopting the above, in connection with removing affected fowls, he soon put a stop to its ravages. A small lump of tar in the drinking water supplied to fowls will be found beneficial. It is also very beneficial to the human system, in case of consumption, bronchitis and severe colds. — Ex.

Toothache, to Cure.—Take equal parts burnt alum and salt. Saturate a piece of cotton, cover with the mixture, and put in the tooth. Or saturate a small bit of clean cotton with a strong solution of ammonia and apply to the affected tooth. Immediate relief will be experienced.—Moor's One Million Facts.

TOOTHACHE AND NEURALGIA CURE.—Clean cotton, saturated in a strong solution of ammonia.—Dr. Pierce.

TOOTH POWDERS.—The best tooth powder is burnt bread rolled to dust.—E. Fray.

TOOTHACHE JUMPING.—Hot, dry flannels applied to the face and neck is a sure remedy for jumping toothache.—E. F.

Teeth, to Clean.—Make charcoal of bread, pulverize it to a fine powder. Apply daily, morning and evening, with a soft brush and pure cold water. This will keep the teeth white, and cure diseases of the gums.—

Dr. O. Phelps Brown, Herbalist.

TEETH—WHITE.—To have teeth very white, clean them with finely powdered charcoal, mixed with honey.
—E. F.

Tea, Ground Tea.—A French chemist asserts that if tea be ground like coffee before hot water is poured upon it, it will yield nearly double the amount of its exhilirating qualities. By placing a few rose leaves in the tea-cansister a fine flavor will be imparted to the tea.

—Dick's Encyclopædia.

Tomatoes.—How to prolong the season of fruiting: Just before frost, pull up the vines by the roots, and throw them into heaps, or, if convenient, under open sheds, when they will ripen up for some ten or twelve days.—Ex.

Tomato Catsup.—Formula: One-half peck tomatoes. Wash and slice them. Put them in preserving kettle and let them stew gently until quite soft, but do not stir them. Strain juice through a seive and put back into the kettle. Add twenty-four cloves, one-half ounce alspice, one-half ounce mace. Salt and cayenne to taste. Boil down to one-half the original quantity. The next day strain out the spice, and to every pint of juice add one-half gill vinegar. Bottle and cork tightly.—Scientific American Cyclopædia.

The Hunter's Secret.—To catch game, such as mink, musk-rats, weasels, racoons, otter, etc. Take one ounce of valerian, one-quarter ounce of commercial musk,

one pint of whiskey. Mix all stogether, and let stand for two weeks. Put a few drops on your bait.

Things to Try.—Try popcorn for nausea.

Try cranberries for malaria.

Try a sun-bath for rheumatism.

Try ginger ale for stomach cramps.

Try clam broth for a weak stomach.

Try cranberry poultice for erysipelas.

Try a wet towel to the back of the neck when sleepless.

Try eating fresh radishes and yellow turnips for gravel.

Try eating onions and horse radishes to relieve dropsical swellings.

Try buttermilk for removal of freckles and tan.

Try hard cider—a wine-glass three times a day—for ague and rheumatism.

Try breathing the fumes of turpentine or carbolic acid to remove whooping cough.

Try a cloth wrung out from cold water put about the neck at night for sore throat and croup.

Try snuffing powdered borax up the nostrils for catarrhal "cold in the head."

Try walking with your hands behind you if you find yourself becoming bent forward.

Try a silk handkerchief over the face when obliged to go against a cold piercing wind.

Try planting sunflowers in your garden if compelled to live in a malarial district.—Canadian Star Almanac.

To Boil or Not to Boil.—A good rule for boiling is the following: Fresh meats, fresh poultry, fresh fish, all alike, should be plunged into as much boiling water

as will cover them. Boil quickly three or four minutes, in the case of meat, fish, one minute; then draw the kettle back, add a little cold water to reduce the heat and keep it covered and let the contents simmer only until done. The quick boiling "sets" the surface of the meat, which keeps in the flavor and goodness when the inner portion is gently cooked until done; this is all the boiling needed. When really boiled, fresh meat is tough and flavorless, so that to boil meat successfully it should not be boiled at all. Fresh meat should be put into boiling water, and salt meat into cold, is another rule worth remembering. Add salt and pepper when about done. If added at first, the juices will be drawn out of the meat into the soup.—New York Tribune, Nov., 1894.

Table for Boiling Vegetables.—The following valuable table of time for the boiling of vegetables will be of use to many cooks:

Asparagus, fifteen to thirty minutes. Use cold water. Beans (shell), one to two hours. Use cold water. They will cook quicker by adding a pinch of soda.

Beans, lima, forty to fifty minutes. Use hot water. Beans, string, require from thirty to forty-five minutes. The first water should be poured off.

Young beets, from forty-five to sixty minutes. Use hot water.

Winter beets, from one hour to one hour and thirty minutes. Use hot water. Add pinch of soda and spoonful of salt

Cabbage, thirty to forty-five minutes.

Cauliflower, thirty to forty-five minutes.

Carrots, forty minutes.

Green corn, from twenty to thirty minutes. Use hot water.

Dried corn must be soaked over night. Allow it to cook one hour. Add pinch of soda.

Onions, thirty to forty-five minutes.

Oyster plant, thirty to sixty minutes.

Early peas, twenty to thirty minutes. Use boiling water.

Winter peas (soak over night) forty to sixty minutes. Use cold water and pinch of soda.

Parsnips, thirty to forty-five minutes.

Potatoes twenty to thirty minutes.

Spinach twenty to thirty minutes.

Summer squash, thirty to forty-five minutes. Should be steamed or cooked with but little water.

Winter squash, twenty to thirty minutes.

Turnips, cut in halves, one hour; cut in thin slices, thirty minutes. Use boiling water and pinch of soda.

Tomatoes, fifteen to twenty minutes. — Canadian Family Herald and Star, Oct., 1894.

Vinegar, Substitute for.—Rhubarb. Drain off the first water from rhubarb when it has stewed five minutes; evaporate it to the requisite sourness, and use it instead of vinegar for the table and cooking. It is an agreeable acid, and in many cases it can be used instead of lemons. It is a natural acid, and more wholesome than vinegar. It may be evaporated to intense sourness, and bottled and reduced with water when required for use.—Scannel's Cyclopædia.

A FAIR IMITATION OF WHITE WINE VINEGAR may be made of mashed raisins and water, kept in a warm place for a month. Three pounds of raisins to two gallons of water; add the rind of two lemons. Vinegar makes better when bung is left open for air.—National Farmers' and Householders' Cyclopædia.

TO MAKE CHEAP AND GOOD VINEGAR.—To eight gallons of clear rain water add six quarts of molasses. Turn the mixture into a clean, tight cask; shake it well two or three times and add one pint good yeast. Place the cask in a warm place, and in ten or fifteen days add a sheet of common wrapping paper, smeared with molasses, and torn into narrow strips, and you will have good vinegar. The paper is necessary to form the mother or life of the liquor.—Moor's Industrial Facts.

Ventilation in Winter.—Much of the illness that comes in cold weather is due to defective ventilation, and the greatest possible care should be taken to secure thorough ventilation in winter. Its importance cannot be too often impressed upon us.

Good health requires that each person should inhale eight cubic feet of fresh air every minute; and this amount must be supplied or the health will suffer.

The continued breathing of impure air depresses the system and causes headache and dullness of the intellect.

We weaken our vitality by shutting tight all the doors and windows, keeping the temperature of our rooms above 71 deg., and breathing over and over again the hot vitiated air.

It is a mistaken notion that because a room is cold the air must be pure. Cold is as readily contaminated with impurities as heat, but the cold makes the foulness less perceptible to the senses.

Ventilate the sitting-room when the family are at meals. The proper way to ventilate is to raise one window from the bottom and lower another from the top. This will permit the entrance of pure air from without, and the exit of the impure air from within.

The sleeping rooms should have a supply of fresh air

constantly through the night, that the atmosphere may not become vitiated during sleep. In the morning the windows should be opened wide to admit the air and sunshine. In a well-ventilated bedroom the sleep is more refreshing, and the vigor and strengh of the whole system more fully restored by the night's rest.

There is no ventilator known so efficacious as a fireplace; as long as wood or coal is burning in the grate, there is a constant draft upward which is carrying off the foul air all the time, both night and day.

House plants aid much in purifying the atmosphere of a room. They are constantly consuming the carbolic acid from the air, and giving off oxygen.

A lamp burning in a room helps to render the air impure by consuming the oxygen and giving off carbolic acid. When a lamp burns brightly the air is pure; when it burns dimly the air is impure. The air we breathe should contain a due supply of moisture, therefore a vessel containing water should be kept upon the stove or other heating apparatus, so that it may give off moisture to the heated atmosphere of the room. By observing this rule you will contribute to your health.—

Household, Jan., 1895.

Water.— Simple method of purifying water: It is not generally known that pounded alum posssesses the quality of purifying water. A tablespoonful of pulverized alum sprinkled into a barrel of water (the water stirred at the same time) will, after a few hours, by precipitating to the bottom the impure particles, so purify it, that it will be found to possess nearly all the freshness and clearness of the finest spring water. A pailful containing four gallons may be purified by a single teapoonful of alum.—Ex.

SIGNS OF THE PRESENCE OF SPRINGS OF WATER.-For ages many absurd fables were believed with respect to the best method of discovering springs, and even now the divining rod has not lost its partisans. There are, however, indications which may lead to the discovery of springs in cases where nothing would appear to those unaccustomed to observations of natural phenomena to induce a belief in their existence. The following are some of the more simple. In the early part of the year, if the grass assumes a brighter color in one particular part of a field than in the remainder, or, when the latter is ploughed, if a part be darker than the rest, it may be suspected that water lies beneath it. In summer the gnats hover in a column, and remain always at a certain height above the ground over the spots where springs are concealed. In all seasons of the year denser vapors arise from those portions of the ground which, owing to the existence of subterranean springs, are more damp, especially in the morning or the evening. The springs to which these rules apply are such as are near the surface; when the source is lower the only safe guide is to bore, but to work this with success a certain knowledge of elemetary geology is absolutely necessary. - The Canadian Star Almanac.

HIDDEN SPRINGS.—Undoubtedly there are many hidden springs or streams of water, of greater or less volume, now lying idle and undeveloped at the base of many of our mountain ranges, which might with a little skill and labor be opened up for the benefit of those seeking homes. A little has already been accomplished in this direction in some parts of our mountain home. In addition to the valuable items on this subject from the Canadian Star Almanac, the compiler desires to submit

the following hints for the benefit of those who may desire to look more deeply into this all-important subject. Wheat grass, wire grass, joint rushes, and the purple lilly, all indicate that water is near at hand. The wild rose bush, when it grows straight and thrifty, with flowers full and of a deep crimson color and fragrant, is regarded also as an indication of water. The presence of quaking-asp and straight, thrifty and tall maple, is regarded, by some, as a good sign of water. Avoid spots where scrub oaks and maple grow. Willows, more especially when straight and high, and of smoth bark, are said to indicate water not far from the surface of the ground. A farmer, as a test for water, sowed a ten-acre plot of land down to oats, and dug his well where the tallest grain grew. He obtained a good well of water at a moderate cost. A Mr. Luker, of Davis County, by mere chance, discovered an underground stream of water, by the ear, while lying prostrate upon the ground .-F.ditor.

SOFT WATER.—To every ten gallons of water take a quart of bran, tie it up in a strong bag and boil in the water. The lime will rise to the top and can be skimmed off.—Scientific American, 1894.

TO SOFTEN HARD WATER.—Add two ounces best quick lime, dissolved in water, to every twety-five gallons. Allow the same to stand a short time, so that the lime will unite with the carbonate of lime, and be deposited at the bottom of the receptacle.—Boston Journal of Chemistry.

Warts and Corns.—To cure in ten minutes: Take a small piece of potash and let it stand in the open air till it slacks, and then thicken it to a paste with pulver-

ized gum arabic, which prevents it from spreading where it is not wanted.—Moor's One Million Facts.

Warts.—The juice from the stem of the elder will soon cure a wart, or the parts can be rubbed with a raw potatoe.—E. Fray,

Watercress.—The free use of watercress, cooked and raw, will renew the blood and cure a deep decline.

—Edwin Fray.

Note.—Watercress should never be used before well washing it in salt and water, so as to kill all insects which infest it, and lay their spawn under the leaves.—E. F.

Weak and Inflamed Eyes.—Borax, one drachm; camphor water, six ounces. The above simple prescription is in common use by the highest medical authorities. Drop two or three drops in the corner of each eye.—Exchange.

Whooping Cough.—Whooping cough is quickly overcome by mixing equal parts of castor oil and syrup of rhubarb; one teaspoonful to be given three times a day.

Worms.—Important. Effect of worms: Too many potatoes, or butcher's meat, or milk not scalded, creates endless worms in children, many of whom become emaciated and die from the effects of worms, without the cause having been suspected, the worms fattening whilst the child starves. Worm powder—Sena leaves dried in the oven, next rubbed to powder, is what is sold for worm powder.

To Destroy Worms.—Twenty drops of oil of turpentine, taken in a tablespoonful of water, before breakfast for several mornings, is a quick destroyer of worms. Children should be given from four to six drops in a little milk, with two or three drops of esssence of peppermint.—Prof. E. Fray, London, England.

WORM CURE.—Garlic (roots) cut up. two ounces; brandy, one pint. Bottle. Lable and keep well corked. Dose for adult, one tablespoonful taken before breakfast for two or three days; then fast a day and repeat the doses if found necessary until a cure is effected. The bowels should be kept regular. Used on board an emigrant ship while crossing the sea, with the very best results.—Mrs. Harriet M. Furster. City.

Pink root and sena is a sure remedy. An ounce of each should be steeped in water, and one-fourth of the tea be given at a time, once a day for four days in succession. Fast a day or two and then take the tea. Purge bowels afterwards. -Dr. Gunn.

TAPE WORMS.—Dr. Dowler expelled tape worms of different lengths by prescribing the continued use of slippery elm bark. He ordered the bark to be chewed and swallowed in moderate quantities.—IVm. B. Dick, N. Y.

Whitewash.—Treasury whitewash, resembling paint. This receipt for whitewashing, sent out by the Lighthouse Board of the Treasury Department, has been found by experience to answer on wood, brick and stone, nearly as well as oil paint, and is much cheaper. Slack one-half bushel lime with boiling water, keeping it covered during the process; strain it and add a peck of salt, dissolved in warm water; three pounds ground rice put in boiling water, and boiled to a thin paste; one-half pound powdered Spanish whiting, and a pound of clear glue, dissolved in warm water. Mix these well together,

and let the mixture stand for several days. Colored matter, with the exception of green, may be put in it, and made of any desired shade. It retains its brilliancy for many years. Keep the wash thus prepared in a kettle or portable furnace, and when used put it on as hot as possible, with painters' or whitewash brushes.—

Techno Chemical Receipt Book.

FIREPROOF WHITEWASH.—Make ordinary whitewash, and add one part silicate of soda or potash to every five parts of the whitewash.—Dick's Encyclopædia.

Wedding Anniversary.—Fifth year, wooden wedding; tenth year, tin wedding; fifteenth year, crystal wedding; twentieth year, china wedding; twenty-fifth year, silver wedding; thirtieth year; pearl wedding; fortieth year, ruby wedding; fiftieth year, golden wedding; seventy-fifth year, diamond wedding.—Canadian Star Almanac.

Yarrow, its Useful Properties. — Yarrow is of great value to use in the manner of tea, in the first stages of any disease. By its prompt use it will remove obstructions, colds, fevers, inflammation, pleurisy, spitting or vomiting of blood, piles, female weakness, bowel complaint, etc.—Fray's Golden Recipes.

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